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GENERALISATION
OF THE
REDUCTION OF HOURS OF WORK

Fifth Item on the Agenda

PART III: COAL MINE



GENEVA
INTERNATIONAL LABOUR OFFICE

International Labour Conference

TWENTY-FOURTH SESSION

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PART III: COAL MINES

GENEVA

INTERNATIONAL LABOUR OFFICE

1938

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THIRD PART

COAL MINES

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INTRODUCTION

The question of the generalisation of the reduction of hours of work, which figures on the Agenda of the Conference, necessarily includes coal mines, one of the most important of all industries.

The reduction of hours of work in coal mines forms, in the present volume, the subject of a special study distinct from that for industry in general. The reasons for this are as follows:

First of all, the international regulation of hours of work in coal mines has been treated as a separate problem since 1929. Thus, the Draft Convention of 1931 and the revised Draft Convention of 1935 laid down for this industry international regulations distinct from those applying to other industrial undertakings; and since the reduction of hours of work first came before the International Labour Conference, the coal mining industry has always been considered separately. This distinction is based both on technical and on economic considerations; and there is reason to expect that it will be upheld this year and that the Conference will decide, as at previous sessions, in favour of the principle of separate regulations for coal mines. If so, the Conference should have at its disposal, as a basis for discussion, a list of points corresponding to the special regulations in view.

Secondly, the question of reducing hours of work in coal mines is shortly to be examined not only by the Conference but also by the Tripartite Technical Meeting on the Coal Industry, which has been convened for 2 May 1938. For the Conference, the question is part of the item on its Agenda, the generalisation of the reduction of hours of work; for the Technical Meeting, which is to sit about a month before the Conference, it is the essential subject of discussion, since the agenda of the Meeting is the consideration of the question of the reduction of hours of work in coal mines, account being taken of the economic and social factors which may have a bearing on hours of work in that industry.

Thus the Conference and the Technical Meeting will be called upon to consider the same question within a few weeks of each other; they will have to study the same problems and their general object will be the same. Different though their functions are, there is an intimate relation between their work. The Technical Meeting, being of an advisory character, should be in a position to make suggestions which may be of value to the Conference when the moment for decision arrives. In order that the tasks of the one and the other may be easier to accomplish, that their activities may correspond, and that they may arrive at homogeneous results, it is indispensable that the work of the two bodies should be based on the same information. It is also of the greatest importance that the experts attending the Technical Meeting should know in what form the problems which it is for the Conference to solve will come before that body.

These are the reasons why the Office has dealt separately with the question of the reduction of hours of work in coal mines. It has thus been able to submit to the Tripartite Technical Meeting the study prepared for the present Session of the Conference.

This separate study is divided into two parts, the first of which contains an analysis of the national regulations, while the second reviews the international aspect of the question.

The first part is of an essentially documentary character. It consists in an examination of the manner in which national regulations have dealt with the problems raised by regulation of hours of work in coal mines. Chapter I enumerates and classifies the various kinds of national regulations; the following chapters deal respectively with the scope of these regulations, normal hours of work, extensions of normal hours, and supervision of enforcement of the regulations.

This documentary study covers most of the countries whose annual output of coal, in recent years, has exceeded one million tons (the lignite figures being converted for this purpose into the equivalent quantity of hard coal). The countries are as follows: Australia, Austria, Belgium, Canada, Chile, China, Czechoslovakia, France, Germany, Great Britain, Hungary, India, Italy, Japan, Netherlands, New Zealand, Poland, Rumania, Spain, Turkey, Union of South Africa, United States, U.S.S.R. and Yugoslavia.

The second part, forming the conclusions, is of a purely international character. It contains a rapid historical review of the

previous efforts of the International Labour Organisation to regulate and reduce hours of work in the coal-mining industry, followed by an examination of the problems raised by the proposal for international regulations with such a reduction in view and of the ways in which these problems might be solved. Lastly, in accordance with the customary procedure in cases of this sort, the Office proposes a list of points on which it considers that Governments might be consulted.

CHAPTER I

THE DEVELOPMENT AND STRUCTURE OF NATIONAL REGULATION

Miners' work is generally admitted to be particularly arduous and dangerous, and hence hours of work were regulated in mines, and more especially in coal mines, earlier than in other branches of industry. Miners not only enjoyed a measure of social protection that even now does not extend to all workers, but for some time back they have also worked shorter hours than other wage earners.

Hours of work for mine workers were first regulated by law during the last decades of the nineteenth century. At the beginning of the twentieth century the movement spread, and on the eve of the war regulations of this kind were to be found in many big coal-producing countries. Hours of work were fixed at 8 or 9 in the day when a 10 to 12-hour day was still the rule in other industries.

After the war a fresh impetus was given to the legal regulation of working hours. The 8-hour day and 48-hour week became the usual standards for all industrial occupations including coal mining. Mine workers were then on more or less the same footing as other industrial wage earners.

During the last few years, as a result of the depression, the movement for the reduction of working hours by legislation has grown in strength and has in some cases made itself felt more rapidly in mines than in other industries. Evidence of this is to be found in the *Belgian*, *French*, and *Polish* regulations. In other countries, such as *Italy* and *New Zealand*, mine workers have benefited by a general reduction in hours of work.

Other forms of regulation, such as collective agreements, working along parallel lines with legislation, and often supplementing it by more liberal provisions, have, more especially in the *United States of America*, helped to reduce the hours of workers employed in coal mines.

Thus the regulations in force in various countries take the following forms:

Legislative regulation (including administrative decrees, orders and decisions, etc.); arbitration awards; collective rules; standards of employment; compulsory rules of employment; collective agreements; custom.

The two commonest systems are legislative and contractual regulation, the former being more significant for the purposes of such a study as this, since in most cases the conditions for concluding and applying collective agreements are fixed by law. Moreover the clauses of the agreements must often comply with legal provisions.

A. — FORM OF NATIONAL REGULATIONS

§ 1. — Legislative Regulation

This type of regulation must be considered with reference to legal form and to scope.

1. LEGAL FORM

As regards legal form, a distinction must be drawn between laws that are self-contained and laws that call for supplementary regulations. The distinction is not always easy to draw, since even if all laws do not call for administrative decrees or orders, they must nearly always be supplemented or interpreted by commentaries in the form of circulars, minutes, etc. The following, however, may be considered as *self-contained laws*: The *Austrian Mines Act*, the *Canadian* provincial Mining Acts, the *British Coal Mines Regulation Act* of 1908, amended in 1919, 1926, 1930, 1931 and 1932, the *New Zealand Mining Act*, the *Spanish Hours of Work Act* (this Act contains a chapter on mines), and the *Turkish Labour Code*. The *Mines Act* of the *Union of South Africa* may also be mentioned, though its hours of work provisions do not apply to coal mines.

There are many more *laws that call for supplementary regulation*, and this heading covers most of the enactments limiting hours of work in coal mines, viz. the *Belgian Acts* of 1931, instituting an 8-hour day and a 48-hour week, and 1936, instituting a 40-hour week in unhealthy industries; the *Chinese Factory Act*; the *French Act*

of 1936 instituting a 40-hour week in industrial, commercial, handicraft and co-operative establishments; the *German* general Hours of Work Act consolidated by an Order of 1934; the *Hungarian* Act of 1937; the *Indian* Mines Act; the *Italian* Legislative Decree of 1937 instituting a 40-hour week; the *Japanese* Mining Act; the *Netherlands* Mining Act; the *Polish* Act of 1937 respecting reduction of hours of work in coal mines; the *Rumanian* Act respecting hours of work in industry; the *Yugoslav* general Workers' Protection Act. Federal mining legislation in the *United States* and the War Precautions Act of 1916 which still regulates conditions of work in *Australian* mines may also be classified under this heading.

2. SCOPE OF LEGISLATIVE REGULATION

Hours of work in coal mines are governed in various countries by provisions ranging from very general laws to regulations that apply specifically to coal mines alone. Legislative regulations should therefore be classified with reference to scope.

This may be done satisfactorily enough by classifying them under the following headings:

- Laws or regulations concerning coal mines or mines in general, with provisions on hours of work;

- General laws or regulations concerning hours of work, without any special provisions for mines;

- General laws or regulations concerning hours of work, with special provisions for mines;

- Laws or regulations concerning hours of work in mines in general;

- Laws or regulations concerning hours of work in coal mines in particular.

General laws or regulations concerning mines, with provisions on hours of work, are at present in force in a number of countries. *Great Britain* and *New Zealand* have enacted special laws for coal mines. In *Canada*, *Czechoslovakia*, *India*, *Japan*, the *Netherlands*, and the *Union of South Africa*, mining Acts apply to mines in general. In the last-named country, however, the provisions in regard to hours of work do not apply to coal mines.

General laws or regulations concerning hours of work, without any special provisions for mines (Labour Codes, Factory Acts, Hours of Work Acts), often regulate hours of work in coal mines. This is true of *Chile*, *China*, *Hungary*, *Italy*, *Rumania*, and the *U.S.S.R.* In *Yugoslavia* the coal-mining industry is covered by an Act that

makes the necessary provision for the general protection of workers as regards hours of work.

General laws or regulations concerning hours of work, with special provisions for mines, may be subdivided as follows:

In *Belgium, Czechoslovakia, Germany, Poland, and Turkey* the Acts contain only a few provisions concerning mines (dealing more especially with the calculation of hours of work).

In *France* the Act lays down, as regards mines, a general principle to serve as a basis for special regulations.

In *Spain* the Act contains a special chapter laying down very complete and detailed regulations applicable to mines only. This system forms a connecting link with the next type of legislation.

Laws or regulations concerning hours of work in mines in general are a less common form of regulation. This heading covers the *Austrian* Act concerning the employment of women and young persons and the reduction of hours of work in mines, and also several regulations in force in the *U.S.S.R.*, such as Decrees and Orders issued by the People's Commissary for Heavy Industry, decisions given by the courts of the *U.S.S.R.* and Federated Republics, and Orders issued by the People's Commissary for Justice.

Laws or regulations concerning hours of work in coal mines in particular are to be found in several countries.

In *Belgium* a Royal Order issued in pursuance of the Act of 1936, which provides for the institution of the 40-hour week in unhealthy industries, sets the limit for hours of work in coal mines at 45 in the week.

In *France* surface workers were not treated in the same way as underground workers when the provisions of the Act instituting the 40-hour week were applied to coal mines by various Decrees and Orders issued during 1936 and 1937.

In *Great Britain* the Act of 1908, as amended on various occasions, deals with underground workers, while the Act of 1911 and the Regulations of 1913 deal with surface workers (employment of women and young persons, hours of work for winding enginemen).

In *Poland*, under the Act of 1937, the Council of Ministers has power to reduce hours of work in coal mines, and three Orders have been issued laying down conditions for the application of the Act to underground workers operating under unhealthy conditions, underground workers, and certain classes of surface workers.

In *Spain* the Decree of 18 June 1936 reduced hours of work in coal mines to 40 in the week for underground workers and to 44 for surface workers.

In the *United States* legislation of this kind has been passed in fourteen States (Arizona, California, Colorado, Idaho, Maryland, Missouri, Montana, Nevada, North Dakota, Oklahoma, Oregon, Utah, Washington, and Wyoming) and in the Territory of Alaska.

§ 2. — Arbitration Awards

In *Australia* hours of work in the coal mines of most States are still governed by the "Edmonds Orders" issued in 1916 under the War Precautions Act. Subject to these Orders, however, hours of work are regulated by the awards of industrial committees or conciliation boards and the decisions of the special Coal Industry Tribunal which was set up under the Industrial Peace Act of 1920.

In *New Zealand* hours of work in coal mines are regulated by the awards of conciliation and arbitration courts or by collective agreements approved by these courts.

§ 3. — Collective Rules

This system applies in *Germany*, where under the Act of 1934 respecting the organisation of national labour the labour trustees may, after discussion by a committee of experts, issue collective rules for groups of undertakings. In some industries the labour trustees have simply converted the existing collective agreements into collective rules. This is what has happened in the coal mining industry.

§ 4. — Standards of Employment

In *Spain* the joint boards instituted by the Act of 27 November 1931 lay down standards of employment that serve as a basis for the conclusion of contracts of employment and afford workers a minimum of protection. These standards may not contain any clause that is less favourable to the workers than the corresponding legislative provision, and they thus form, as it were, a connecting link between legislative and contractual regulation. Such standards have been laid down for the coal-mining industry; they are usually provincial.

§ 5. — Compulsory Rules of Employment

In *India* any mine owner or manager may be required by the Chief Inspector of Mines to frame by-laws that, when approved by the local government, have effect as if enacted in the Act. In *Japan* the Mining Act also provides for the establishment of regulations which are binding when approved by the Director of the Mining Inspection Bureau.

§ 6. — Collective Agreements

Collective agreements regulating conditions of employment, and more especially hours of work, are common in the mining industries of several countries. As a rule, the manner in which such agreements shall be concluded is fixed by law; sometimes the agreements must also by law contain certain clauses.

In some countries national collective agreements have been concluded.

In *Italy* a national collective agreement has been concluded, in accordance with the provisions of the Legislative Decree of 1937 concerning hours of work, between the Fascist Federation of Mining Employers and the National Fascist Federation of Mine Workers. This agreement came into force on 1 November 1937.

In the *Netherlands*, under the Act of 24 December 1927, there is also a national collective agreement in the mining industry.

In the *United States* conditions of work in mines are in practice regulated by a national agreement, since nearly all agreements are based on that applying in the Appalachian coalfield, which is one of the most important in the United States.

Regional collective agreements are much commoner.

In *Austria*, under the Mines Act of 1919, supplemented by the Federal Order of 1933, hours of work may be fixed at more than 8 in the day by collective agreement, provided the weekly total does not exceed 48.

In *Canada* collective agreements, which are very common in the coal-mining industry, must comply with the special regulations applying in each Province.

In *China* a few collective agreements have been concluded in the mining industry in accordance with the Act concerning collective agreements.

In *Czechoslovakia*, under the legal regulations, an important part is played by collective agreements in fixing conditions of work.

In *France* the system is very widely used, and a large number of collective agreements have been concluded in mining areas since such agreements were regulated by the Act of 24 June 1936.

Some of the provisions of the collective agreements concluded in the coal-mining industry in *Great Britain* affect hours of work. Since 1926 agreements have been concluded on a district basis only.

In *Poland* collective agreements may, under the Act of 1937, be concluded either at the discretion of the parties or as a result of arbitration awards. The agreements must be communicated to the labour inspector, who records them in a special register.

In *Rumania* several collective agreements have been concluded either by negotiation between the parties or as a result of arbitration awards.

In the *U.S.S.R.* collective agreements play only a small part in regulating hours of work and merely reproduce the clauses of the Codes and Orders in force.

In *Yugoslavia* collective agreements of this kind are only to be found for State mines and a few private mines.

It should be pointed out that in countries where there are lignite mines the agreements applying in these mines are not the same as those concluded for other coal mines. This is true, for example, in *Czechoslovakia*, *Germany*, and *Poland*.

§ 7. — Custom

The administration of provisions concerning hours of work is often a matter of custom, though exceptions are not introduced in this way. But to-day it seldom happens that the actual hours are fixed by custom. Practically the only example is to be found in the *Union of South Africa*, where the number of hours worked by native miners in the day is not fixed; instead, they are employed on a task basis and finish their work when the task is completed.

B. — EXISTING REGULATION ¹

A brief survey will be given here of the regulations covering hours of work in coal mines in the countries studied in this Report.

¹ In the references given below, the abbreviation "*L. S.*" refers to the *Legislative Series* published by the International Labour Office, and the abbreviation "*B. B.*" to the *Bulletin* of the former International Labour Office at Basle.

AUSTRALIA

The regulations of *New South Wales* should be examined first since this State supplies three-quarters of the coal extracted in Australia.

Hours of work in the New South Wales coal mines are not regulated by any special Act, but are still subject to special Commonwealth Orders, known as the Edmonds Orders, which were issued in 1916 in pursuance of the War Precautions Act. Within the limits prescribed by these Orders, hours of work in coal mines are governed by awards of the Industrial Commission or of the conciliation committees set up for specified classes of mineworkers, and by awards of the special Coal Industry Tribunal that was set up under the Industrial Peace Act of 1920. These awards and decisions do not always apply to all the mines in New South Wales; some apply only to special classes of workers, such as mechanics, safety men, etc.

The Edmonds Orders also apply to all coal and shale mines in the States of *Queensland*, *Tasmania*, and *Victoria*. *Queensland*, *Victoria*, and *Western Australia* have also passed special Coal Mines Regulation Acts containing provisions for the regulation of hours of work by special boards or courts. In a Victorian mine owned by the State, hours of work are regulated by a State Coal Mines Industrial Tribunal.

AUSTRIA

The conditions of employment of women and young persons and the hours of work in mines are regulated by the Mines Act of 28 July 1919¹, amended by the Federal Government Order of 31 May 1933².

The collective agreements concluded between employers' provincial associations and trade union federations comply with the provisions of the Act and lay down certain conditions for its application.

BELGIUM

Hours of work in coal mines are regulated: by the general Act of 14 June 1921³ instituting an 8-hour day and a 48-hour week; and by a Royal Order of 26 January 1937 instituting a 45-hour week in coal mines⁴. The Act of 14 June 1921 confirmed the rules laid down in 1919 by the Joint Committee on Mines. It is administered by Royal Orders issued after consultation with the associations of employers and workers concerned, the competent sections of the industrial and labour councils, the Superior Public Health Council, the Superior Labour Council, and the Superior Council of Industry and Commerce. The authorities and associations consulted must deliver their opinion within two months of being requested to do so.

No Orders dealing specially with mines have in fact been issued. A Royal Order of 28 February 1922⁵, amended by a Royal Order of 30 March 1936, specifies the persons to be considered, in any industry, as holding a position of trust, and mentions certain categories for the mining industry. It may be added that the Royal Order of 23 June 1924⁶,

¹ *B. B.*, Vol. XIV, 1919; p. 111.

² *L.S.*, 1933, Aus. 5.

³ *L.S.*, 1921 (Part I), Bel. 1.

⁴ *L.S.*, 1937, Bel. 1.

⁵ *L.S.*, 1923, Bel. 2, Appendix.

⁶ *L.S.*, 1924, Bel. 6 G.

which allows a special overtime quota for transport operations, applies to all undertakings and consequently also to mining.

The Royal Order of 26 January 1937, which reduced hours of work for underground workers in coal mines to 7½ in the day and 45 in the week, was issued under the Act of 9 July 1936 instituting a 40-hour week in industries or branches of industry where work is carried out under unhealthy, dangerous, or arduous conditions¹. Under this Act, the number of hours actually worked may, on the proposal of the Ministers in Council, be progressively reduced to 40 in the week. The Government must first consult the joint committees or the most representative associations of employers and workers concerned, the Superior Labour and Social Welfare Council, and, so far as is necessary, the Superior Public Health Council. The authorities and associations so consulted must deliver their opinion within two months.

In Belgium hours of work are not to any great extent the subject of contractual regulation.

CANADA

Hours of work in coal mines are governed by enactments and collective agreements.

At present, apart from the Lord's Day Act, there is no Dominion legislation either concerning hours of work in industry in general or in the coal-mining industry in particular. Regulations concerning hours of work therefore vary from one Province to another. It will be sufficient to examine those of *Alberta*, *British Columbia*, *New Brunswick*, *Nova Scotia*, and *Saskatchewan*, the Provinces which produce nearly all the Canadian coal.

In Alberta conditions of work in coal mines are governed by the Coal Mines Regulation Act². An Act bearing the same name is in force in British Columbia³. Hours of work in the New Brunswick coal mines are regulated by the amended Mining Act⁴. In Nova Scotia the Coal Mines Regulation Act, amended in 1927, 1934, and 1935, is in force⁵. The legal provisions as to hours of work in the Saskatchewan coal mines are to be found in two different Acts—the Coal Mines Safety and Welfare Act of 1932⁶ and the Coal Mining Industry Act of 1935⁷. Further, in British Columbia and Nova Scotia there are laws dealing with hours of work in general, which are also applicable to coal mines.

Each Province, of course, applies the legal regulations throughout its territory, but collective agreements, which usefully supplement legislation, are applicable only in certain districts. These agreements, although as a rule negotiated locally, are fairly uniform; moreover, they must comply with the provincial legal regulations fixing hours of work either for industry in general or for coal mines in particular.

CHILE

Hours of work in mines are regulated by the Labour Code (Legislative Decree No. 178 of 13 May 1931)⁸.

¹ L.S., 1936, Bel. 11.

² L.S., 1930, Can. 8.

³ *Revised Statutes of British Columbia*, 1924, Chapter 171.

⁴ L.S., 1933, Can. 4.

⁵ L.S., 1924, Can. 7; *Labour Legislation in Canada*, 1934 and 1935.

⁶ L.S., 1932, Can. 5.

⁷ Cf. *Labour Legislation in Canada*, 1935.

⁸ L.S., 1931, Chile 1.

CHINA

The new Mines Act ¹ passed on 25 June 1936 and providing that hours of work for underground workers shall be 8 in the day, has not yet come into force.

Coal mines are therefore still governed by the Factory Act of 30 December 1929, in accordance with the interpretative note of the Minister of Industry dated 16 October 1931 ². This Act provides in section 8 that normal hours of work for adults shall be 8 in the day and that in case of need, these hours may be exceeded, though not by more than 2 hours.

The Factory Act and the new Mines Act apply throughout Chinese territory.

Very few collective agreements have been concluded in the mining industry under the Collective Agreements Act which came into force on 1 November 1932. The agreements comply with legal regulations concerning hours of work. In practice, however, hours of work in Chinese coal mines are not uniform; they vary from 8 to 12 hours.

CZECHOSLOVAKIA

Hours of work in coal mines are regulated by the Act of 19 December 1918 ³, which came into force on 3 January 1919 and laid down rules for instituting an 8-hour day and a 48-hour week with a weekly rest in all branches of economic activity, including mining. The Act was supplemented by administrative regulations contained in an Order of 11 January 1919 ³ and by a circular of the Minister of Social Welfare dated 21 March 1919 ³.

Further, provision is made in the general Mines Act of 23 May 1854, as amended and supplemented by the Act of 24 January 1934, for supervising the application of the regulations.

In the legal regulations an important part is assigned to collective agreements concluded separately for each of the various coalfields. The agreements referred to in the present study are those concluded in the Ostrava-Karvina coalfield as regards bituminous coal, and the coalfields of North-west Bohemia and Falkov as regards lignite.

FRANCE

Hours of work in mines are regulated by the Act of 21 June 1936 instituting a 40-hour week ⁴, by the Administrative Decrees and Orders issued under that Act, and by a number of collective agreements.

The Act of 21 June 1936 is a general enactment fixing maximum hours of work per week for workers and salaried employees in industrial, commercial, handicraft, and co-operative undertakings. This general provision applies to surface work in coal-mining undertakings. For underground work the Act fixes a special weekly limit (38 hours 40 minutes).

A number of administrative Decrees and Orders have had to be issued under the Act. The Decree applicable in the coal-mining industry is that of 25 September 1936, fixing the number of hours for underground

¹ *National Government Gazette*, 26 June 1936.

² *Collection of Labour Laws and Regulations*, March 1937.

³ *B.B.*, Vol. XIV, 1919, pp. 26-40.

⁴ *L.S.*, 1936, Fr. 8.

work¹, and that of 27 October 1936 respecting surface workers². A certain degree of flexibility has been introduced into the above two Decrees by the Decree of 21 December 1937³.

A Decree dated 11 January 1938⁴ contained provisions for the application of the 40-hour week law of 21 June 1936 to open lignite mines and also to workshops, workplaces, electric power plants, and other establishments of these undertakings in which the extracted materials are treated or transformed. The régime set up by this Decree is similar in many respects to that covering surface work in underground mines.

During 1937 further regulations of an administrative character were issued to facilitate the application of the Act of 21 June 1936 to the coal-mining industry. Reference should be made to the Ministerial Orders of 13 February⁵, 7 May⁶, and 1 September 1937⁷ limiting the extensions contemplated in the Decree of 25 September 1936 and regulating overtime.

The Act of 21 June 1936 laid down the general procedure for preparing and reviewing administrative Decrees. These are issued either *ex officio* or at the request of one or more of the employers' or workers' organisations concerned. In both cases the employers' and workers' organisations concerned are to be consulted and to give their opinion within a month. Since, moreover, the Act specifies that the Decrees shall refer so far as possible to agreements, the Minister of Public Works and the Minister of Labour have set up joint committees, on which the occupational groups concerned are represented, with a view to assisting in the preparation of draft Decrees, as was done for the administration of the Eight-Hour Day Act.

The various legal provisions as to hours of work are supplemented by collective agreements. Generally speaking, collective agreements are governed by the Act of 24 June 1936⁸, which deals especially with agreements concerning the relations between employers' and workers' associations in any branch of industry or trade. The provisions of such agreements may be made binding on all employers and workers in the district concerned if the administrative authorities are satisfied, after enquiry, that the associations negotiating the agreement may be considered as representative of employers and workers in their branch.

Collective agreements play a particularly important part in the mining industry. Reference should be made to those concluded in 1936 and 1937 between the representatives of the mine workers and mine owners of Anzin and of the Nord and Pas-de-Calais Departments, that is, of the most important coalfield in France. The various agreements deal with the methods of applying the 40-hour week to surface workers, the distribution of working hours in departments where work is necessarily continuous, the making up of time lost owing to bad weather, permanent and temporary exceptions, and work on Sundays and public holidays.

¹ *Journal officiel*, 27 September 1936, p. 10240.

² *L.S.*, 1936, Fr. 14 (A) and (C). A Decree issued on 11 January 1938 (*Journal Officiel*, 20 January 1938) provided for the application of the 40-hour week law of 21 June 1936 to open lignite mines as well as to shops, workplaces, electrical stations and other establishments in which the extracted materials are treated or transformed. The régime established by this Decree is very similar to that covering surface work in underground coal mines.

³ *L.S.*, 1937, Fr. 3. ⁴ *Journal officiel*, 20 January 1938.

⁵ *Journal officiel*, 14 February 1937, p. 1933. ⁶ *L.S.*, 1936, Fr. 7.

⁷ *Journal officiel*, 2 September 1937, p. 10125 ⁸ *L.S.*, 1936, Fr. 7.

GERMANY

Hours of work in coal mines are regulated by the general Hours of Work Act consolidated by the Order of 26 July 1934¹. As regards underground work in bituminous coal mines the Act contains only a few special provisions (calculation of the length of the shift, unhealthy work, workplaces where the temperature is high). Surface work in such mines and all work in lignite mines are covered by the general provisions of the Act. Hours of work in coal mines are also regulated by collective rules published under the Act of 20 January 1934² for the organisation of national labour, and promulgated by the labour trustees. These rules have taken the place of the former collective agreements; as a matter of fact, many of the agreements have been converted, with slight amendments, into collective rules and are still in force. The provisions of the collective rules as to conditions of work are binding as minimum standards for the work in question. In some cases such rules may be substituted for, or introduce exceptions to, legislative provisions.

There are no collective rules or agreements that are applicable throughout German territory. The provisions vary in each coalfield. The principal collective rules referred to in this Report are those for the Rhenish-Westphalian coalfield as regards bituminous coal and for central Germany and the Rhineland as regards lignite.

GREAT BRITAIN

Hours of work in coal mines are regulated by Acts, regulations adopted thereunder, and collective agreements.

The principal regulations concerning the hours of work of persons employed underground are contained in the Coal Mines Regulation Act of 1908, as amended in 1919, 1926, 1930, 1931, and 1932³.

The only legislative measures applicable to male surface workers are the Coal Mines Act of 1911⁴ and the Regulations adopted in 1913; both the Act and the Regulations only limit hours of work for winding enginemen.

Hours of work for women and young persons employed in or about a mine on the surface are regulated by the Coal Mines Act of 1911 as modified by the Act of 1920 relating to the conditions of employment of women, young persons and children⁵.

Collective agreements play an important part in determining mine-workers' conditions of employment and are at present in force in nearly every district. They are negotiated by the mine owners and the district trade unions, nearly all of which are affiliated to the Miners' Federation of Great Britain. The agreements applicable to surface workers have been negotiated by the trade unions for the occupations concerned.

The collective agreements are negotiated freely. They do not depend upon legislation, but they cannot modify the terms of the law. Collective agreements affect hours of work in the following respects: limitation of hours of surface workers; determination of the length of the Saturday morning shift for underground workers; regulation of the length

¹ *L.S.*, 1934, Ger. 13.

² *L.S.*, 1934, Ger. 1.

³ *B.B.*, Vol. IV, p. 94; *L.S.*, 1919, G.B. 4; 1926, G.B. 2; 1930, G.B. 6; 1931, G.B. 7; and 1932, G.B. 5.

⁴ *B.B.*, Vol. IX, p. 9.

⁵ *L.S.*, 1920, G.B. 9.

of breaks, payment for overtime work and work done on Sunday or during the week-end. Since 1926 there have been no national collective agreements.

HUNGARY

Until the Act of 29 July 1937¹, concerning hours of work, minimum wages and paid holidays, was promulgated, hours of work in Hungarian mines were governed by the rules of employment for each undertaking.

The Act of 29 July 1937 applies to all workers who are bound by a contract of employment and consequently to mineworkers. Provision is made for administrative regulations, which have not yet been issued so far as mines are concerned.

INDIA

Acts promulgated by the Government of India regulate hours of work in mines of all kinds. The Act at present in force is the Indian Mines Act (IV) of 1923 as amended by Acts XIII of 1928, X of 1935, and XI of 1936². Regulations consistent with the Act may be made by the Governor-General in Council and by local governments. Further, any mine owner or manager may be required by the Chief Inspector of Mines to frame by-laws that, when approved by the local government, have effect as if enacted in the Act.

ITALY

Hours of work in mines are regulated by a Legislative Decree of 29 May 1937, by which the collective agreements of 1934 to 1935 reducing hours of work to 40 in the week were made binding. The Decree provides that workers hiring out their services for industrial purposes shall not work more than 40 hours in the week or 8 in the day³. Salaried employees are still covered by the Royal Decree of 15 March 1923⁴, which provides that hours of work shall be 8 in the day and 48 in the week.

New legalised provisions are contained in the national collective agreement for all extractive industries which came into force on 1 November 1937 for a period of three years. It was negotiated by the National Fascist Federations of Employers and Workers in the Extractive Industries.

JAPAN

Conditions of work, including hours of work, in coal mines, as in other mines, are governed by an Ordinance entitled "Regulations for the Employment and Relief of Miners". This Ordinance was issued by the Department of Agriculture and Forestry on 3 August 1916 and was amended by departmental Ordinances of 24 June 1926⁵, 24 May 1927, 1 September 1928⁶, 26 June 1929, and 21 December 1936. The Ordinance

¹ Cf. *Industrial and Labour Information*, Vol. LXIII, No. 6, 9 August 1937, p. 174.

² *L.S.*, 1923, Ind. 3; 1928, Ind. 1; 1935, Ind. 3; 1936, Ind. 2.

³ *L.S.*, 1937, It. 3.

⁴ *L.S.*, 1923, It. 1.

⁵ *L.S.*, 1926, Jap. 2.

⁶ *L.S.*, 1928, Jap. 1.

of 1916 was issued in pursuance of the Mines Act of 8 March 1905, section 75 of which provides that the holder of a mining right shall establish regulations concerning the engagement and employment of miners after applying for a permit to the Director of the Mines Inspection Bureau. Section 79 provides that the competent Minister may by ordinance limit the hours of mineworkers.

Any rules of employment drawn up by the management of a mine in pursuance of the Act and approved by the Director of the Mines Inspection Bureau are legally binding.

Neither the Mines Act nor the Regulations for the employment and relief of miners provide for collective agreements. Administrative and interpretative decisions, such as those contained in the circulars addressed by the Bureau of Social Affairs to branch directors of the Mines Inspection Bureau, make up for the absence of legislative regulations by laying down certain definite standards.

NETHERLANDS

The legal provisions governing hours of work in coal mines are contained in the Mining Act of 27 April 1904¹, amending the Act of 21 April 1810², and in the Decrees of 22 September 1906³, 13 October 1916⁴ and 21 March 1930⁵, supplementing the Act of 1904. Hours of work are also regulated by the national collective agreement concluded on 17 October 1921 for the mining industry and since amended a number of times.

NEW ZEALAND

Under the Act of 8 June 1936⁶ amending the Industrial Conciliation and Arbitration Act of 1 October 1925⁷ the Court of Arbitration must fix at not more than 40 the maximum number of hours (exclusive of overtime) to be worked in any week by any worker bound by an award given or an agreement approved by the Court, unless, in the opinion of the Court, the industry concerned cannot be carried on efficiently when working hours are so limited, in which case the Court must fix a limit between 40 hours and the limit fixed in the previous award.

The arbitration awards and agreements at present applicable in coal mines are based on a 40-hour week.

Further, the Coal Mines Act of 1 October 1925⁸ also contains provisions concerning hours of work.

POLAND

Hours of work regulations in the Dombrowa and Cracow coalfields are based on the Act of 18 December 1919 concerning hours of work in industry and commerce⁹, which has been amended on several occasions. The most important amendments were introduced before 1933 and are

¹ *Staatsblad*, 1904, No. 73.

² *Bulletin of Laws*, No. 285.

³ *Staatsblad*, 1906, No. 248; *L.S.*, 1922, Neth. 4.

⁴ *Staatsblad*, 1916, No. 474.

⁵ *Ibid.*, 1930, No. 105.

⁶ *L.S.*, 1936, N.Z. 1.

⁷ *L.S.*, 1925, N.Z. 1.

⁸ *L.S.*, 1925, N.Z. 2.

⁹ *L.S.*, 1920, Pol. 1.

contained in the consolidated text of 15 October 1933¹. Since the abolition of the Saturday half-holiday by the Act of 22 March 1933, which came into force on 1 January 1934, hours of work have been 48 in the week, instead of 46 as previously. Further, several administrative Decrees have been issued respecting supervisory services, transport services, and breaks. These Decrees apply generally to all branches of economic activity.

In Upper Silesia hours of work are regulated by the provisions of 1918 respecting economic demobilisation.

The situation was profoundly modified in 1937, particularly as regards coal mines. On 14 April 1937 Parliament passed an Act empowering the Council of Ministers to reduce hours of work in coal mines by order. On 4 June of the same year the Silesian authorities made this law applicable to Silesia.

On 20 July 1937 the Council of Ministers used the powers conferred upon it to issue three Orders reducing hours of work in coal mines for workers employed on arduous or unhealthy work underground, workers permanently employed underground, and certain categories of surface workers respectively. The Orders came into operation on 1 November 1937 and will remain in force throughout the territory of the Republic until 1 January 1940.

Although the relevant legislation affords considerable opportunities for regulating hours of work by collective agreement and arbitration, it does not appear that the collective agreements concluded so far have played an important part in fixing hours of work in coal mines, particularly in view of the situation created by the Orders of 1937. In Upper Silesia, however, the collective agreement of 1929 contains some administrative provisions concerning hours of work, and, more especially, overtime and work on Sundays and public holidays.

RUMANIA

Under the Act of 9 April 1928² amended by the Act of 10 October 1932³ respecting hours of work and the employment of women and young persons, hours of work were fixed at not more than 8 in the day or 48 in the week. These two Acts apply to all industries. An administrative Decree was issued on 30 January 1929⁴ and amended by a Decree of 19 December 1932⁵.

Several regional or local collective agreements have been concluded in the mining industry either by negotiation between the parties or under arbitration awards.

SPAIN

Hours of work in coal mines are regulated by legislative provisions and by the standards of employment (*bases de trabajo*) drawn up by joint boards.

The legal regulations on hours of work in coal mines are based on the Decree of 1 July 1931 fixing the maximum statutory daily hours of work⁶ (this Decree was converted into an Act on 9 September 1931 and contains

¹ L.S., 1933, Pol. 1.

² L.S., 1928, Rum. 1.

³ L.S., 1932, Rum. 6.

⁴ L.S., 1929, Rum. 1.

⁵ L.S., 1932, Rum. 6.

⁶ L.S., 1931, Sp. 9.

a chapter applying to mines in general) and the Decree of 18 June 1936¹ reducing hours of work in coal mines to 40 in the week for underground workers and 44 in the week for surface workers.

These legislative provisions apply throughout Spanish territory.

The standards of employment are established by joint boards set up under the Act of 27 November 1931. The boards are provincial organisations consisting of employers and workers in equal numbers. The standards they prescribe include clauses dealing with hours of work and rest periods, and may not be less favourable to the workers than the standards laid down in legislative provisions.

The most important labour regulations covering coal mines which were in effect in 1935 were about ten in number and chiefly applied in the provinces of Oviedo (Asturies), Santander, León, Ciudad-Real (Puertollano) and Teruel.

TURKEY

Hours of work in general are regulated by the Labour Code of 8 June 1936². The Code applies to mines and contains a few provisions dealing expressly with this industry, and more particularly with methods of calculating hours of underground work.

UNION OF SOUTH AFRICA

The Mines and Works Act of 15 April 1911 as amended in 1931³ provides that no person employed to perform underground work in any mine shall work underground for a longer period than 8 hours during any consecutive period of 24 hours or 48 hours during any consecutive 7 days. This provision does not, however, apply to coal or base metal mines.

According to information supplied by the Government of the Union, the situation as regards hours of work in coal mines is as follows:

There are considerable differences between conditions of work in South African and in European coal mines, due to the employment in the former of two distinct classes of wage earners, white and coloured workers, and to the fact that only 5 per cent. of the total number of wage earners are white workers. The white workers usually act as supervisors; they conduct blasting operations and in isolated cases erect and withdraw timber. They usually work 48 hours in the week.

The actual mining is done by coloured workers, who are employed on a task basis; their day's work ends when their task is completed. No account is taken of hours worked; workers who finish their task before the end of the shift are brought to the surface as soon as circumstances permit, and in mines which can be entered by an adit they return to the surface on foot.

UNITED STATES

The Federal Bituminous Coal Act⁴, which was approved by the President on 26 April 1937 and is at present in force, contains no specific provision concerning hours of work, but it provides that employers and workers in the coal industry shall have the right to conclude collective agreements with respect to hours of work, wages, and working conditions.

¹ L.S., 1936, Sp. 1.

² L.S., 1936, Turk. 2.

³ L.S., 1931, S.A. 1.

⁴ Public Law, No. 48.

Moreover, fourteen States and the Territory of Alaska have passed legislation limiting hours of work either for underground mines or for coal mines in general. The fourteen States are: Arizona, California, Colorado, Idaho, Maryland, Missouri, Montana, Nevada, North Dakota, Oklahoma, Oregon, Utah, Washington, and Wyoming. On 3 July 1937 the State of Pennsylvania passed an Act restricting hours of work to 8 per day and 44 per week. Apparently this Act applies to all industry, and therefore also to the mining industry. Except in the State of Maryland, where the law provides for a 10-hour day, the daily maximum is fixed at 8 hours in all these laws ¹.

In spite of this marked tendency towards legislative regulation, hours of work in United States coal mines are in fact fixed by collective agreement.

The various clauses of the collective agreements are discussed in national or regional conferences and then embodied in local district agreements. It should be pointed out that in most cases the maximum number of hours actually worked by miners falls below the prescribed limit, which is reached only during periods of peak demand. Most of the local collective agreements applying in the bituminous coal industry have been influenced by the Code drawn up under the National Recovery Administration. They are, moreover, based on the most important and complete of the agreements, that concluded for the Appalachian coalfield on 26 September 1935 by the International Union of United Mine Workers of America and certain district unions on the one hand, and the coal producers of the Appalachian coalfield on the other. This agreement, which was effective until 1 April 1937, was renewed on that date and, with certain changes, remains in effect until 31 March 1939. Conditions of work in the anthracite industry are regulated by a collective agreement, the provisions of which are much the same as those of the agreement in the bituminous coal industry. The anthracite agreement which was concluded 7 May 1936 and came into effect 1 May 1937 remains valid until 30 April 1938.

U.S.S.R.

Hours of work in coal mines are regulated by various provisions contained in Orders or Decrees issued by the central authorities of the Union and in the Labour Codes of the Federated Republics. The most important of these Codes is the R.S.F.S.R. Labour Code of 1922,² the provisions of which apply in practice, with hardly any modifications, in all the Federated Republics. Since 1922 the Code has been amended³ to incorporate principles or rules laid down by the central authorities of the Union, and more especially the Order issued on 2 January 1929 by the Central Executive Committee and Council of People's Commissaries, establishing the principle of a 7-hour day⁴.

As regards mines, mention should also be made of the Regulations issued on 25 November 1924⁵ by the People's Commissariat of Labour⁶

¹ A summary of most of the State labour laws is to be found in the *Bureau of Labor Statistics Bulletin* (U.S. Department of Labor), Nos. 370 *et seq.*

² *L.S.*, 1922, Russ. 1.

³ The various amendments have been published in the *Legislative Series*.

⁴ *L.S.*, 1929, Russ. 3.

⁵ *L.S.*, 1930, Russ. 1. (II).

⁶ The People's Commissariat of Labour was suppressed in 1933 and its duties were assigned to the Central Council of Trade Unions.

and by the Supreme Economic Council respecting the safety of mine workers (these Regulations have since been amended), the Order issued on 10 November 1928 by the People's Commissariat of Labour reducing hours of work in particularly arduous and dangerous occupations and establishing a list of such occupations, and the Decree issued by the People's Commissariat for Heavy Industry on 10 July 1936 modifying the method of calculating hours of work in mines.

It may be added that the principle of a 7-hour day has been confirmed in the new Constitution of the U.S.S.R. dated 5 December 1936.

Contractual regulation plays only a small part in the fixing of hours of work in coal mines.

YUGOSLAVIA

Hours of work are regulated by the general Workers' Protection Act of 28 February 1922¹ and by various service regulations of a regional character, the most recent of which were issued in 1929².

In 1924 special regulations³ applicable throughout the country were also published providing for the prolongation of hours of work in industrial and mining undertakings in virtue of agreements between the owner of the undertaking and the staff.

Further, in all State mines the detailed application of the national regulations is governed by collective agreements. Collective agreements are less common in private mines.

CHAPTER II

SCOPE

In defining the scope of any regulations on conditions of employment in coal mines, and particularly those which govern hours of work, a number of complex problems must be faced.

Mines are as a rule large undertakings, which operate in conditions varying widely, with natural circumstances, from one region to another. They comprise workplaces in which the technical characteristics of the work are strikingly different (underground workings, surface plant, ancillary establishments, etc.); they employ a large force of workers, ranging from expert technicians to unskilled labourers; and the material conditions of work are also very varied, some posts requiring a continuous and exhausting effort, while others involve mere attendance.

With so complicated a subject, mines regulations cannot escape a certain corresponding complexity. Not only does their scope vary in extent from country to country, but the methods of defining it and the criteria adopted vary too. It has therefore been necessary to subdivide the present chapter, so that the diversity of the different provisions concerning scope may be better grasped. The first section concerns delimitation with reference to the character of the mine, i.e. according to the nature of the premises or operations, the type of mining engaged in, or the type of coal extracted; the second deals with delimitation with reference to the persons employed in the mine, i.e. specification of the persons covered or of the persons excluded.

A. — DEFINITION OF SCOPE AS REGARDS MINES

As indicated above, the different national regulations have adopted three principal criteria for defining their scope with reference to the character of the mine. Some concentrate on the nature of the premises or operations, and distinguish between

underground and surface work or between principal and ancillary establishments; others take the type of mining as the criterion, and apply or not according as the mine itself is underground or open; others again base the distinction on the type of coal extracted—anthracite, bituminous coal, lignite, etc.

§ 1. — Nature of Premises or Operations

1. MEANING OF THE TERM "MINE"

Some regulations, particularly in the British Empire, are based on a Mines Act which contains an exact definition of the term "mine". This, for instance, is the definition given in the *British Coal Mines Act, 1911* (it applies also to the 1908 Act):

"Unless the context otherwise requires, 'mine' includes every shaft in the course of being sunk and every level or inclined plane in the course of being driven and all the shafts, levels, planes, works, tramways and sidings both below ground and above ground in and adjacent to and belonging to the mine, but does not include any part of such premises on which any manufacturing process is carried on, other than a process ancillary to the getting, dressing or preparation for sale of minerals."

Similar definitions are to be found in *Canada* (the Provincial Acts of Alberta, British Columbia and Nova Scotia), in the *Indian* regulations, and in the *New Zealand Coal Mines Act* of 1925.

The *Spanish* regulations have also made a point of determining their scope as exactly as possible, and the special chapter on mines of the Hours of Work Decree, 1931, contains a list of the operations covered, which include the following: underground work consisting in the investigation, preparation for extraction and actual extraction of mineral substances with a view to the direct utilisation thereof, by means of pits, drifts, adits, etc.; transport within mines; drainage, safety and hygiene work; the installation, maintenance and minding of power-generating plant and of engines and machinery necessary for raising and lowering employees and supplies, for the extraction of products, drainage, ventilation, lighting and, in general, all operations exclusively and directly connected with underground work. As regards surface work, the Decree covers excavation, levelling, earthwork and demolition; the loading of the products extracted; and the minding of machines required for the work mentioned above. This definition of scope applies also to the Decree of 1936, which reduced hours of work in coal mines.

Definitions of a much less exact sort are all that can be found in most regulations; these include, naturally, the general Acts concerning hours of work. The *German* Order of 26 July 1930 concerning hours of work, for instance, merely states that it applies to "workers in industry and transport". In *France* the Forty-Hour Week Act applies to industrial "establishments", but then proceeds to regulate hours of work in "underground mines"; the *Belgian* Act of 1921 applies to "mines, surface workings, quarries and workings of all sorts where extraction is carried on"; and the *Rumanian* Act of 1928 and Administrative Regulations of 1929 have adopted an almost identical form of words.

In the *U.S.S.R.*, the Labour Code of the *R.S.F.S.R.*, which applies almost unchanged to all the other Republics of the Union, covers "all establishments and undertakings". The Order of 21 January 1929 determines, in pursuance of the Code, the undertakings in which the 7-hour day is to be applied; these are "all undertakings in production, industry, transport, communications and local economy, whether State-owned, public or private". This definition includes mines.

But frequently the special regulations for mines are also rather vague in the definition of their scope. Many merely state that they apply to coal mines, or to all establishments in the coal industry.

2. UNDERGROUND AND SURFACE WORK

A considerable number of regulations provide for a distinction between underground and surface operations; but in most instances this affects the hours of work provisions only—particularly in the case of the general mining Acts, the body of which nearly always applies to the whole industry.

Statutory provisions on hours of work applying only to underground operations are to be found in the *Canadian* Provincial Acts of Alberta, New Brunswick, and Nova Scotia and in *Great Britain* and the *Netherlands*. In some instances these provisions apply also to certain groups of operations closely related to underground work, such as those carried out by the shaft services (winding enginemen in *Great Britain* and the *Netherlands*, or signalmen in the *Netherlands*).

In some countries, different legislative regulations, contained either in the same or in separate measures, apply to underground and surface work respectively. This is the case *inter alia* in *Belgium*, *France*, *India*, *Japan*, *Poland*, *Spain*, and the *U.S.S.R.*

Elsewhere, the same legislation applies without distinction to underground and surface work alike, though in some cases there are fuller regulations concerning the method of calculating hours for workers employed underground.

The collective agreements and arbitration awards also usually apply both to underground and to surface work. Some, however, contain different provisions for each of the two categories. This is also the case as regards the *German* collective rules.

Lastly, it should be noted that several regulations apply not only to production proper, but also to research and to the installation of plant, e.g. sinking pits, driving galleries, etc., even when these operations are done by specialised (and not by mining) undertakings.

3. ANCILLARY ESTABLISHMENTS

Establishments ancillary to mines are covered by the mines regulations in some countries and excluded from their scope in others. In *Belgium* the 1921 Act states that "the dependencies of the undertakings in question are also covered, whatever their nature". In *Canada* the Saskatchewan Act applies to the processing and marketing of coal. In *Czechoslovakia* the Act of 1918 includes—in so far as "mining establishments" are concerned—mines, coke ovens, slag furnaces, and blast furnaces. The *Indian* Act provides that premises in which coke making is carried on shall not be excluded. In *Japan* the authorities have stated that the Act should be interpreted as applying to the administrative services of mines and to ancillary establishments, even when situated at a distance from the mine, if they are registered under the same name. In *New Zealand* the regulations extend to all the establishments belonging to the mine. Lastly, the legislation of the *U.S.S.R.* relating to mines must be considered as applying to all establishments belonging to the mine, wherever they may be situated.

On the other hand, the *British* Act does not apply to any part of mining premises on which a manufacturing process is carried on, other than a process ancillary to the getting, dressing or preparation for sale of minerals. In *France* the Decree applying to surface work in coal mines provides that subsidiary industries are covered by the Decrees applying to the occupational groups to which such industries belong¹. The Acts and Decrees in force in *Spain* exclude

¹ As regards open lignite mines, see note 2, p. 11.

surface work done in workshops or premises similar to those of other industries, and transport outside the mine.

4. SPECIAL CRITERIA

A few hours of work regulations provide for the exclusion of establishments with small staffs or not using mechanical power. It would appear that exceptions of this sort do not concern coal mines. Nevertheless it should be pointed out that the new *Chinese* Mines Act is to exclude establishments not employing at least 50 persons underground at a time.

In *France* the collective agreement for the Northern coalfield (Anzin, Nord and Pas-de-Calais) stipulates that the provisions of the Decree concerning surface work shall not apply to seasonal and occasional operations and to work paid by the job.

§ 2. — Type of Mine

Deposits of coal can be mined by means of underground or of open workings, the position of the seam being the deciding factor. A few regulations distinguish between these two types of mine, which involve widely different conditions of work. But as open mining is seldom possible, legislation in many coal-producing countries makes no mention of such a distinction¹.

In *Germany* the collective rules applying to the lignite mines contain two sets of somewhat different stipulations, the one applying to open and the other to underground mines. In *Spain* the 1931 Decree applies to surface excavation and levelling work, earthwork, the loading of products extracted and the minding of machines. In the *United States*, although there are separate collective agreements for underground and open mines, their contents are roughly the same; in fact both are based on the general agreements applying to the anthracite and bituminous coal industries respectively.

In the countries where only the hours of persons employed underground are regulated, open mines, if any exist, are naturally not included. This is the case in the *Netherlands*.

¹ In France a special Decree was issued 11 January 1938 concerning the application of the 40-hour week in open lignite mines (see note 2, p. 11).

§ 3. — Type of Coal extracted

There is not a single case in which mines are excluded from the scope of a national scheme because of the type of coal extracted; indeed many schemes apply the same provisions to all mines in the coal-extracting industry. It should be noted in this connection that the *Belgian* legislation applies to anthracite and to bituminous coal without distinction; and that under the *British* Act coal includes bituminous coal, cannel coal, and anthracite.

But in other cases the regulations are different for the different main categories of coal. In *Germany* the Hours of Work Order applies to the whole mining industry, but there are separate collective rules for anthracite and bituminous coal mines (*Steinkohle*) and lignite mines respectively, the principal difference residing in the manner in which the length of the shift is calculated. It was therefore necessary to determine what was meant by the terms *Steinkohle* and lignite. Lignites are types of coal the structure of which may be either earthy and pulverulent or compact, with a dull or shiny fracture; they are generally brown in colour, but the varieties which have a shiny conchoidal fracture may be almost black. The principal characteristics for distinguishing lignite from bituminous coal are given in the following table; at least two of these must be present simultaneously to establish a distinction.

Test	Lignite	Bituminous coal
Appearance when scratched:	Generally brown, rarely black	Black
Treated with an alkali:	Solution of a very dark colour	No dark colouring
Reaction to lignine (reddish colour when treated with dilute nitric acid):	Marked reaction	No reaction

Similarly, in *Czechoslovakia*, where there are separate collective agreements for the same two principal types of coal, the Government stated in its reply to the questionnaire sent out by the Office in 1930 that lignite may be distinguished from bituminous coal by the following characteristics: bituminous coal is black in colour and to the touch, whereas lignite is brown; lignite is slightly lighter than

bituminous coal; its content of water is generally higher than that of bituminous coal and its heat value lower.

In *Spain* there are special standards of employment for the lignite mines of the Province of Teruel. In *France*, the Decree applying to underground work states that it applies to lignite as well as to other coal mines ¹.

As a rule no distinction is made in European regulations between anthracite and bituminous coal.

In the *United States* there are different national agreements for the bituminous coal and the anthracite industries.

B. — DEFINITION OF SCOPE AS REGARDS PERSONS

§ 1. — Methods used

The general characteristics of the methods of defining scope with reference to the persons employed in the mine differ according as the object is to determine the persons covered by the regulations or those excluded. Most regulations make use of loose definitions in the former case, and are much more precise when specifying the classes to which their provisions shall not apply.

In numerous measures, the persons covered are determined by such phrases as "all underground workers" and "persons not employed underground" (*France*) or "any person employed directly or indirectly in production" (*China*). But there are others which aim at limiting their scope by definitions of a more material sort—particularly certain regulations which distinguish between persons employed underground and at the surface.

Mention may also be made of another type of distinction: the collective agreements in force in *Canada* and the *United States* apply only to members of the United Mine Workers of America.

As regards persons excluded, the practical necessity for greater exactitude has led to the use of several methods of definition. Some legislative schemes use a formula covering a whole class of persons. They state, for instance, that persons in positions of management or employed in a confidential capacity, or not engaged in manual work, are excluded; this course is adopted by the *French* Decree concerning underground work in coal mines. But in almost

¹ A Decree was issued on 11 January 1938 particularly dealing with the application of the 40-hour week to open lignite mines (see note 2, p. 11).

every case where such a method is employed, further details are left to supplementary regulations (administrative orders, etc.); this is the procedure in *Belgium* and *Rumania*. In *Japan*, the Director of the Bureau of Social Affairs has issued a circular with a list of classes of persons which should be considered as excluded.

Sometimes the legislative regulations designate an authority which is to determine the precise limits of application. In the *U.S.S.R.* the Central Council of Trade Unions and the competent economic authorities are required to decide, for insertion in collective agreements, what classes of persons should be excluded in accordance with the principles laid down in the regulations themselves. In the same way, the *British* Coal Mines Act of 1908 provides that if a question arises as to whether a person is a workman, or a workman of any particular class, it shall be referred to the Secretary of State, and his decision shall be final.

Further, it is not always easy to distinguish between regulations defining their scope on the basis of operations or premises, and those which do so by classes of persons. Frequently (in the legislation of *France*, *Great Britain*, *Japan*, *the Netherlands*, etc.) specification of the work appears to be no more than a means of determining the classes of persons covered, or of distinguishing one from another with a view to applying different schemes.

Lastly, it may be added for information that an international Convention was adopted by the Nineteenth Session of the Conference in 1935 prohibiting the employment of women on underground work in mines of all kinds. As regards surface work, women are as a rule subject to the same provisions as men.

§ 2. — Persons covered

As has been said, the regulations of several countries use formulæ of a very comprehensive nature for defining the classes covered. The following information will show this still more clearly, but it will also show that in many other cases the regulations restrict their own operation in this respect, and must in consequence contain a more exact definition.

In *Australia* Edmonds Order No. 1 (concerning hours of work) applies, with certain exceptions, to "all underground employees".

The *Chinese* Factories Act applies to all persons "employed directly or indirectly in production".

In *Czechoslovakia* the legislative regulations apply to all employed persons—i.e. to manual and non-manual workers and salaried and professional employees, whatever their position.

In *France* the Forty-Hour Week Act applies as a rule to all the persons employed in the undertaking, whatever their grade, duties, or method of payment. The Decree concerning underground work in coal mines covers "all persons engaged in underground work, whatever undertaking employs them, and in whatever work they are engaged"; and the Decree concerning surface work states that its provisions extend to "workers and salaried employees in the service of the mine in question, whose occupation does not directly belong to the mining industry, provided the exclusive object of the work of such persons is the maintenance or operation of the mine".

In *Germany* the Hours of Work Order assimilates the following to workers: apprentices preparing for the kinds of employment covered, mine officials, foremen, and technical staff—i.e. the great majority of salaried and professional workers. In the Rhenish-Westphalian bituminous coalfield there are separate collective rules for manual workers, technical staff and commercial staff respectively.

In *Great Britain*, the Acts apply to all workers employed below ground, with a few exceptions, and to winding enginemen; the Coal Mines Act of 1911 defines a winding engineman as "a competent male person, not less than 22 years of age, appointed in writing by a manager for the purpose of working machinery which is employed in lowering and raising persons".

The hours of work provisions of the *Japanese* legislation apply—as far as adult males are concerned—to underground work only.

In the *Netherlands* the legislative regulations on hours of work apply only to underground workers, winding enginemen and signalmen; but the contractual regulations cover all workers.

In *New Zealand* the hours of work provisions of the Coal Mines Act extend only to persons employed on underground work or in charge of steam machinery, but all workers are subject to the general regulations on the 40-hour week. The many arbitration awards which have been issued in this country apply both to underground and to surface workers, but in many districts there are special awards applying to such groups as mechanics, engine drivers, firemen, fanmen, carpenters, fitters, and pumpmen.

In *Poland* the general Hours of Work Act applies to all mining establishments, but there are three special Orders on hours of work

in mines, for the following classes of workers respectively: (a) underground workers employed on particularly exhausting or unhealthy operations (particularly those done in water or mud) or on work at seams over 8 metres high or under 55 cm. thick and at an angle of less than 15°; (b) other workers permanently employed underground and workers employed on continuous operations; (c) surface workers whose duties consist largely in mere attendance (fan minders, telephone operators, bath attendants, nurses, messengers, etc.), and watchkeepers and caretakers.

In *Spain* the regulations relate as a rule to the whole staff of the mines covered; in the provinces of Oviedo and León, however, there are special standards of employment for supervisory staff, and in the latter province there are also standards for salaried employees in the administrative services of mining undertakings or the joint offices which these undertakings maintain.

In the *U.S.S.R.* the Labour Code covers all employed persons, and the Order of 2 January 1929 provides that the 7-hour day shall apply to all workers and salaried employees for whom the working day was fixed at 8 hours before the introduction of the 7-hour day in the undertaking.

The *Yugoslav* legislation defines mine workers as workers employed in mining undertakings who receive wages fixed in advance or are paid at piece rates.

The collective agreements in force in *Canada* and the *United States* must be considered as forming a special case, for they apply only to members of the United Mine Workers of America, or other persons eligible under the constitution of that body. This eliminates not only managers, foremen, etc., but also members of certain political organisations and persons engaged in the sale of intoxicating liquors. Apart from this restriction, workmen, skilled and unskilled, employed in and around coal mines, may be members of the organisation. The United States agreements also treat persons employed in and around coal washers and coke ovens as mine workers.

§ 3. — Persons excluded

There are but few instances in which no class of persons is excluded. The *Czechoslovak* Act of 19 December 1918 is one of these.

Where certain classes of persons are excluded from the scope of the regulations, three principal methods are in use: a general

formula to cover all excluded persons, a detailed list of establishments or persons excluded, and determination of excluded persons by a specified authority. In practice it is often found that two of these methods are used in conjunction with each other in the regulations of a single country.

1. USE OF A GENERAL FORMULA

This method is used mainly in the regulations which exclude only persons whose functions are relatively easy to define (e.g. persons holding positions of management or supervision or employed in a confidential capacity). When exemption is also to apply to persons engaged in intermittent work, or work whose duration cannot be exactly limited, it becomes indispensable to supplement the general formula with an enumeration; indeed, as will be seen clearly from the following particulars, there is a gradual transition from the method of a general formula to that of a detailed list.

In *Australia* the regulations in force in New South Wales exclude under-managers, overmen and surveyors. Those of Victoria and Western Australia also exclude such groups as deputies, engineers, mechanics, electricians and persons in charge of power-driven machinery (except sinking pumps, borers and coal-cutting machines).

The provincial regulations in *Canada* also provide for numerous exceptions. Under the *Alberta* Act mine officials, foremen, cagers, onsetters, stablemen and pumpmen are excluded. In *British Columbia* the Hours of Work Act excludes persons holding positions of supervision or management or employed in confidential capacities, while the Coal Mines Regulation Act states that the manager or overman may enter a mine at any time and remain therein in the necessary discharge of his duties; as regards surface workers, those employed in the office, boarding-house or bunk-house of any mine are excluded from the provisions concerning hours of work. Similar rules are also to be found in the Coal Mines Regulation Act of *Nova Scotia*.

In *China* it has been the practice of the courts to regard domestic servants and cooks as not employed in production and consequently not subject to the Factories Act. Persons employed in posts of supervision and management are to be excluded from the hours of work provisions of the new Mines Act.

In *France* the Decree concerning underground work in coal mines excludes "persons holding posts of supervision or management

who do not ordinarily perform manual work". The collective agreement for the Northern coalfield (Anzin, Nord and Pas-de-Calais) states in this connection that firemen and fire-damp inspectors shall be considered as supervisory staff if they engage in supervision, but not otherwise. Nevertheless the special legislative regulations concerning hours of work apply to supervisory staff.

In *Great Britain* the Coal Mines Act, 1908, limiting hours of underground work in coal mines excludes persons holding posts implying special responsibility (i.e. certain mine officials) or high technical qualifications (mechanics) and some other classes (horse-keepers and persons engaged solely in surveying and measuring).

The hours of work regulations in force in *Hungary* do not apply to salaried employees in managerial posts.

In *India* the regulations exclude persons in positions of supervision or management or employed in a confidential capacity.

The *Spanish* Decree on hours of work issued in 1931 does not apply to managers and other officials of undertakings.

The *Turkish* Labour Code considers that managers, employees in charge of administration, and, in general, all persons required to direct operations, are not workers but representatives of the employer.

In the *United States* most of the collective agreements in the bituminous coal industry exclude certain classes of persons, in particular, mine foremen, assistant mine foremen, bosses in charge of labour, clerks, and members of the executive, supervisory and technical force.

In the *U.S.S.R.* workers and salaried employees engaged at the approaches and entrances to establishments are not covered by the Order limiting hours of work to 7 in the day. An Order of the Commissariat of Labour dated 13 February 1928 states further that the working day cannot be fixed as regards administrative, technical and commercial staff and persons whose work cannot be calculated on a time basis, such as employees giving advice to workers (e.g. inspectors).

In *Yugoslavia*, persons whose duties are such that they cannot be considered as workers for the purposes of the Act are excluded from the scope of the regulations (managers, accountants, cashiers, engineers, etc.).

It would appear, therefore, that the following are the criteria most often adopted in the different regulations which exclude classes of persons by means of more or less general formulæ: the importance of the duties in question, or the responsibility attaching

to them; their intermittent character; their urgency; the fact that their duration cannot be exactly fixed; and lastly, the fact that it is impossible to state in advance when they will have to be performed.

As regards management, the *German* system is one of the few which have attempted to render the criterion used somewhat more exact. The Hours of Work Order provides that the following shall be considered as occupying positions of management: any person with 20 salaried or 50 wage-earning employees under his orders; any person whose remuneration exceeds the statutory upper limit for liability to compulsory insurance; and any person holding a power of attorney for the establishment.

2. USE OF A DETAILED LIST

In a number of countries, the general provisions of hours of work Acts applying to coal mines are supplemented by administrative regulations or similar measures containing full lists of the classes of persons not covered by the original Acts.

In *Belgium*, for instance, the Royal Order of 22 February 1922, as amended by that of 30 March 1936, states that in all undertakings the following persons are to be considered as employed in a confidential capacity and are therefore excluded from the scope of the 8-hour day, 48-hour week Act of 1921, on the same footing as persons holding positions of management:

- (1) managers, assistant managers, factors and works superintendents;
- (2) authorised agents and holders of a power of attorney;
- (3) managers' secretaries, private secretaries and persons attached exclusively to the secretarial department;
- (4) engineers;
- (5) chiefs and assistant chiefs of administrative, commercial and technical services, chief chemists, laboratory chiefs and their assistants;
- (6) cashiers;
- (7) head foremen and job foremen in so far as they can be assimilated to head foremen;
- (8) works or workshop foremen; head store-keepers;
- (9) head stablemen;
- (10) foremen, enginemen, mechanics, firemen, electricians, fitters;
- (11) repair, maintenance, loading and transport foremen;

- (12) gas generator foremen;
- (13) checkers (time-keepers).

For the mining industry in particular, the following are also considered as employed in a confidential capacity:

- (1) mine captains and head overmen;
- (2) deputies and underground inspectors (including shotfirers);
- (3) stall and gang foremen;
- (4) head lampmen.

In *Rumania*, too, where the regulations on hours of work do not apply to persons in positions of management, or indeed to any confidential employees, the competent authorities desired that the meaning to be attached to these terms should be exactly stated. Administrative regulations issued on 30 January 1929 therefore contain a list of persons to be considered as holding confidential posts; this specifies the same classes as are enumerated in the Belgian regulations applying to industry, with the following additions: staffs of nursing services; caretakers, gate keepers and persons required to check workers entering and leaving the works, and watchmen stationed at specified posts.

In *Italy* the Royal Decree which introduced the 40-hour week in industry excludes persons employed at intermittent work not involving continuous occupation, work consisting in attendance only, and watch-keeping, the occupations in question to be more exactly determined by decree of the Minister of Corporations. Pending issue of such a decree, the occupations excluded are those specified in the Decree of 6 December 1923 concerning hours of work in industrial and commercial undertakings. Among the classes of persons in question, there are some which may be found in the mining industry—watchmen, guards, caretakers, weighmen, store-keepers, distribution staff, certain classes of persons engaged in transport, loading and unloading, carters, horse-keepers, staffs of works railways, supervisory staffs not engaged in manual work, etc.

In *Japan* the regulations concerning hours of work in mines provide that, with the authorisation of the head of the Mines Inspection Office, the ordinary hours provisions will not apply to persons whose principal duties consist of supervision and persons employed at intermittent work. A circular sent by the Director of the Bureau of Social Affairs to directors of mines inspection offices on

26 February 1930 states that the following shall be considered as persons engaged in supervision: (1) persons stationed at specified places, mainly for purposes of supervision, i.e. fire guards, caretakers, gate keepers, persons in charge of explosives, persons guarding workplaces, watchmen, etc.: (2) pump minders, persons minding compressed-air machines, fan minders, electricians, workers engaged in the distribution of electric power, etc., who mind their machines at specified places and have little manual work to do; (3) persons stationed at specified places in order to supervise the transport of persons and objects (watchmen on railways, endless railways, roads; signalmen, etc.); (4) workers engaged in minding or supervision as assistants to the persons principally responsible for such duties. Moreover, the following are to be considered as persons whose work is intermittent: (1) workers engaged in transport, such as the drivers of all mechanically-propelled vehicles, horse-keepers, winding enginemen, and persons who go down the mine before the other underground workers and return after them but whose work between the times of entering and leaving comprises breaks of considerable length in such a way that their total actual work does not exceed 6 hours a day; (2) carpenters, electricians and other workers engaged in repairs, who are required to remain at a specified place underground by day and by night but are organised in shifts; the work of these persons must, of course, not be such as to involve continuous effort, their presence being required in order to prevent accidents.

In *Canada* most of the collective agreements in the mining industry contain full lists of the persons excluded. These are usually as follows: mine manager or superintendent, overman or assistant overman, pit boss, stable boss, master mechanic, electrician, weighman, head carpenter, head blacksmith, tippie or breaker foreman, loader boss, night watchman, coke oven foreman, outside foreman, any other foreman, time-keeper, coal inspector and head lampman. Men working on improvements and extensive repairs are also not included.

In *Hungary* hours of work are not limited for horse drivers and persons responsible for the functioning of machinery.

3. OTHER METHODS OF SPECIFICATION

In some countries the regulations designate an authority to which the duty of specifying the excluded classes of persons is referred. It is, however, difficult to differentiate between the

cases in which this method applies and those in which legislation provides for recourse to an arbitration award in disputes concerning operation. As has been said, the *British Coal Mines Act*, 1908, refers disputes of this nature to the Secretary of State.

Other regulations, however, prescribe a procedure by which the excluded classes may be definitely determined; in *Australia*, for instance, Edmonds Order No. 1 excludes not only certain special classes of workers but also such other men as may be considered, by agreement between the Australian Coal and Shale Employees' Federation and the proprietor, to be necessary for the safety or continuous working of the mine.

The clearest case of action by an authority with a view to determining the excluded persons is in the *U.S.S.R.* The Labour Code provides that the Central Council of Trade Unions shall determine the categories of responsible persons (in Party, trade union or Government employment) whose hours are not limited. Further, an Order of the Commissariat of Labour dated 13 February 1928 provides that the working day cannot be exactly fixed for administrative, technical and commercial staff, and that the lists of functions which may be thus excluded shall be drawn up by the trade union and the economic authority competent in the respective region.

Lastly, it should be noted that several classes of workers excluded in some countries are not excluded in others but form the subject of special schemes, which will be dealt with in Chapter IV below (Extensions of Normal Hours of Work).

CHAPTER III

NORMAL HOURS OF WORK

The fixing of normal hours of work is the essential problem in the regulation of hours of work.

The first task arising in this regard is to establish a definition. Are "normal hours of work" to mean the time during which the worker is at the employer's disposal, or the time during which he is in the mine, or again the time he passes at the workplace (time of actual work); and are they to include breaks, interruptions of service, etc. ?

Having established a definition, the next step is to limit hours of work, i.e. fix the number of hours which the worker may in normal circumstances be required to work within a given period. It is seen that there are two factors here—the number of hours worked, and the period to which this number relates.

A further task is to determine the manner in which hours of work may be distributed over the period to which they relate.

There is also the question of lost time. It may sometimes be impossible, during the period to which the calculation of hours relates, to complete the full number of hours corresponding to this period. Are hours not worked to be regarded as irrevocably lost, or may they be made up by increasing the number worked during one of the following periods of calculation ?

Then, for technical reasons, certain operations must go on without a break, and have therefore to be undertaken by a continuous succession of shifts. They require an hours schedule different from that suited to operations which are done in spells of day work (corresponding in length to the daily hours of the staff) and which stop at night and on Sundays.

Other work is done in conditions so unhealthy that workers engaged thereon cannot continue at it, without danger to their health, for as many hours as are prescribed for work in normal conditions.

Lastly, as a general rule, production in mines ceases on Sundays and certain legal or customary holidays. But certain operations must be done on such days, and naturally special regulations are required in this respect.

The above are the problems which a regulation of normal working hours must solve. They are examined in the present chapter in the light of the solutions provided for them in national laws and regulations. Some of these problems require separate treatment for underground and surface workers respectively; whenever necessary, a distinction will therefore be made between the two classes of workers.

A. — DEFINITION AND LIMITATION

These two features of the problem will be examined together, for they are very closely connected. As regards underground work in particular, the figure expressing the limit for hours of work depends partly on the definition of hours used for the calculation; it is clear, for instance, that if one scheme limits the time spent at the face and another the time spent in the mine, there will be a wide difference between the two nominal maxima even though they both correspond to the same amount of actual work.

UNDERGROUND WORKERS

The problem of defining and limiting hours of work for underground workers is extremely complex. Its complexity is due, first of all, to the conditions in which these workers are employed. The working day of the underground miner includes a succession of widely different operations—preparing for the descent, the descent itself, the journey from the pit bottom to the workplace, the work there (interrupted by breaks or other stoppages), the return to the pit bottom, the ascent to the pithead, handing in the lamp, checking out, bath, etc. It is therefore indispensable to state clearly what part of the mining undertaking is to be chosen for calculating the miner's hours of work. There are three possibilities—the undertaking as a whole (including the pithead and the underground workings), the interior of the mine, and the workplace. Hours of work can therefore be determined with reference to the worker's presence in one or other of these places, by limiting

either the time spent in the undertaking, or the time spent in the mine, or the time spent at the workplace.

It will also be seen below that the complexity of the problem of defining and limiting hours of work is further increased because the miner is almost always part of a shift and hours are often calculated not for the individual, but for the whole shift to which he belongs.

§ 1. — Time Spent in the Undertaking

The total period spent in the undertaking is that comprised between the moment when the worker arrives at the pithead and begins to get ready for work, and the moment when he leaves the pithead at the end of his working day. This period is not, as a rule, limited by national regulations, most of which fix the time spent in the interior of the mine or at the place of work. In any case, therefore, apart from certain arrangements made to fit exceptional circumstances; hours of work exclude all the miner's preparations for descent—changing clothes, taking over lamp, checking in, etc., going from the lamp room to the shaft—and the corresponding operations in the opposite order after he returns to the surface.

Further, the shift may include only one winding time (collective descent or ascent), or neither. Apart from this, in order that there shall be no delay when the descent is to start, the rules of the mine usually provide that the workers must be at the top of the shaft ready to go down several minutes before the time at which the descent is due. In *Germany* a provision of this nature is even contained in the collective rules for the Central German lignite mines, which state that the miners must be ready exactly at the time fixed in the time-table. As a result, the difference between the time spent in the undertaking and the time spent inside the mine may vary considerably according to the mine, for it depends on the time required for getting ready, the distance of the time-keeper's office (usually the lamp room) from the opening of the shaft, and the length of the descent or ascent when either of these or both are excluded from calculation of the shift. This is, indeed, the reason why the period spent in the undertaking is not taken as a basis for calculating hours of work.

Nevertheless, in a few special cases account is taken of certain factors not usually included in the shift. The *Austrian* regulations provide that the time required for the roll-call, issuing and returning lamps, tools and explosives, and drawing pay, shall be included in

hours of work. In *Spain* the standards of employment for the Oviedo coal mines and the Teruel lignite mines provide that if the lamp room or timekeeper's office is more than 200 metres from the top of the shaft, the time spent in the mine shall be counted from the moment when the lamp is fetched, ten minutes being allowed for each kilometre.

§ 2. — Time Spent in the Mine

1. DEFINITION AND CALCULATION

The time spent in the mine—i.e. underground—is defined and calculated in different ways according as access to the pit bottom is by a shaft or an adit.

(a) *Access by a Shaft*

When the workers enter the mine by a shaft they are usually lowered and raised in cages. If the group to be wound is relatively small, all its members may find room on the different floors of the cage and only one trip in each direction is required. If the group is larger, its descent and ascent will require several trips of the cage.

In practice, the time spent in the mine is calculated either for the worker taken individually or for the whole group. It should, however, be noted that where the group is relatively small and can be wound at one trip of the cage, the hours of the group are, in practice, the same as those of each of its members—in other words, collective calculation is equivalent to individual calculation. It may be pointed out in this connection that in certain countries hours are calculated for the whole shift of workers as a single unit; this applies for instance in *Great Britain*, where the shift is defined by legislation as “any number of workmen whose hours for beginning and terminating work in the mine are approximately the same”. In some other countries the subdivision of the shift of workers for the purpose of calculating hours is permitted; in *Belgium*, hours may be calculated for the shift or gang, the category or cage-load.

(i) *Individual Calculation*

Where the length of the shift is calculated individually, it is equivalent to the period between the time when the worker enters

the cage to descend and that at which he leaves it at the end of the ascent. The shift thus includes both individual journeys.

This method of calculation is used in *Austria, Canada* (Alberta and British Columbia), *China, France, Germany* (bituminous coal mines in Saxony, and lignite mines), *Great Britain, Hungary, Italy, Japan, New Zealand, Poland, Rumania, Union of South Africa* (white workers), and the *U.S.S.R.* But in the German bituminous coal mines, excluding those of Saxony, the shift ends when the worker enters the cage at the bottom of the shaft, and thus does not include the individual ascent. The same is true of certain mines in Hungary.

The regulations of several of the countries just mentioned provide at the same time for a collective method of calculation. In *Canada* (Alberta), *France*, and *Japan* this method corresponds exactly to the individual method, but in *China* and *Great Britain* the collective method—the only one in fact utilised—has results widely different from those of individual calculation; as will be seen below, it includes neither winding time, and the length of the collective descent (or ascent) must therefore be added to the length of the shift in order to obtain the individual time spent in the mine. In Great Britain, however, individual calculation from bank to bank is used in one mine in the Bristol district and—on Saturdays—for hewers and fillers in Durham as well as for some other classes of workers in certain collieries of this district.

(ii) *Collective Calculation*

Where the shift is calculated on a collective basis, there are three possibilities.

1. It can begin when the first (or last) worker of the group enters the cage to descend, and end when the first (or last) worker of the group enters or leaves the cage on returning to the surface. In this case the shift includes either the collective descent or the collective ascent (only one winding time).
2. It can begin when the first worker of the group enters the cage to descend, and end when the last worker leaves it on returning to the surface. In this case the shift includes both the collective descent and the collective ascent (two winding times).
3. It can begin when the last worker of the group enters the cage to descend, and end when the first worker leaves the

cage on returning to the surface." In this case the shift includes neither the collective descent nor the collective ascent (no winding time).

Collective calculation of the shift including only one winding time is used in the *Canadian* Province of Alberta, *France*, *Japan* (if the group consists of over 20 persons), the *Netherlands*, *Spain* and *Yugoslavia* (in mines where the workers do not travel in cages). As will be seen below (p. 147), this method of calculation is equivalent to the individual method, in that the number of hours constituting the shift so calculated corresponds to the individual time spent in the mine by each member of the group.

Collective calculation of the shift including both winding times is used in *Australia*, *Belgium*, *Czechoslovakia*, *India*, and *Yugoslavia* (in mines where the workers travel in cages). The Czechoslovak Act provides that the time required for lowering and raising all the workers of a shift shall be considered as additional work; but in practice the collective agreements include winding time in the shift. In Belgium the groups of workers in respect of which hours are calculated are usually those travelling together in the same cage; so that in practice collective calculation and individual calculation are identical.

Collective calculation exclusive of winding time is used in *China* and *Great Britain*.

Order of workers during winding. — The order in which workers are raised and lowered is of great importance for collective calculation where the group is sufficiently large to require several trips of the cage. Workers who went down on the first trip and came up on the last would clearly be staying in the mine longer than those who went down on the last trip and came up on the first; and the actual hours of work of the former workers would be extended in comparison with the hours of the remainder. From a social point of view this course would involve different periods in the mine for workers of the same shift, and from an economic point of view it might have an effect if the workers whose productive value is highest—the hewers, for instance—were systematically kept underground longer than the others.

For the above reasons certain schemes—such as those of *France* and the *Netherlands*—provide that the order of descent and ascent of the workers of a group must be approximately the same. The Netherlands regulations even add that the trimmers must go down at the same time as the hewers, and return with them at the end

of the shift. In *Poland* there must be rules for each mining undertaking exactly specifying the order in which the workers are to be lowered and raised.

Winding time. — The length of the winding operations may have an effect on the real time spent in the mine by each individual, if the collective descent or ascent, or both, are excluded from calculation of the shift. More particularly, it is clear that any system under which the ascent—supposing this not to be included in the shift—were unduly prolonged would involve extension of the time spent in the mine by the workers last raised to the surface.

To prevent possible abuse, several schemes provide for the limitation of winding time. In *Czechoslovakia* the collective agreement for the Moravska Ostrava bituminous coalfield states that the lowering and raising of the shift must be completed within specified limits. In *France* the duration of the descent and ascent of any shift or other group of workers must be approximately the same. In *Great Britain* the relevant Act provides that: “the owner, agent or manager of every mine shall fix for each shift of workmen in the mine the time at which the lowering of the men is to commence and to be completed, and the time at which the raising of the men from the mine is to commence and to be completed”; the resulting intervals must be approved by the inspector as “the time reasonably required for the purpose”; and a whole procedure is laid down in case of dispute between the management and the inspector. In *Japan* collective calculation is authorised when the shift comprises over 20 persons, in which case the time required for the collective descent must be approved by the mine inspector. If the workers go down the mine on foot, the time required by the whole shift for this purpose may not exceed half an hour, or one hour if the shift comprises over 200 persons; if the workers are transported by mechanical means, the time allowed is equal to a rational estimate of the actual length of the collective descent plus 30 per cent. of the time fixed for the descent on foot. In the *Netherlands* the time required for raising the shift may not exceed that required for lowering the same shift by more than a quarter of an hour.

Travelling time underground. — Underground travelling is usually included in the time spent in the mine; but in a few exceptional cases provision is made to keep the time spent on this travelling down to the strict minimum, particularly when no mechanical underground transport is available. A time allowance is then

fixed, calculated according to the distance to be travelled, and if the miner exceeds this allowance, the excess is not counted in his hours of work. Thus in *New Zealand*, according to an agreement in force for the Liverpool State Coal Mine, an allowance for time lost travelling (at $2\frac{1}{2}$ miles an hour) is deducted from the "bank to bank" shift to obtain the actual number of hours required of the worker. The standards of employment in force in the *Spanish* provinces of Oviedo and León state that travelling time underground is to be reckoned at 15 minutes per kilometre, but the mine management reserves the right to transport the workers by rail.

(b) *Access by an Adit*

In mines which can be entered by an adit, the time spent in the mine is counted from the moment at which the worker passes through the entrance of the adit until the moment at which he returns to the surface. This is the case in *Belgium*, the *Canadian* Province of Alberta, *France*, *Germany* (both lignite and bituminous coal mines), and the *U.S.S.R.*

In *Australia* a reasonable time is allowed to each worker in which to enter and leave a "tunnel" mine, and this time is included in the hours of work: it is determined by agreement between the proprietors and the Miners' Federation, or, failing this, it is fixed by the tribunal or court. In *Great Britain* the hours for entering and leaving the mine are determined by the management and approved by the inspector; they take the place of the times fixed for the beginning and end of winding in shaft mines. In *Japan* checking in adit mines may take place at an office inside the mine if the Mines Inspection Bureau approves; but such an office may not be more than 600 ken (about 1,200 metres) from the entrance to the mine, and the adit leading to it from the surface must be easy to walk on foot, and its gradient may not be steeper than that of an ordinary surface road; further, the adit must be at least $5\frac{1}{2}$ shaku (1.83 metres) high, and be adequately lighted and ventilated.

In *Hungary* hours of work do not include travelling time in adits.

2. BREAKS AND INTERRUPTIONS OF SERVICE

The very principle on which the calculation of time spent in the mine is based involves the inclusion of breaks and other interruptions in this time. The need for short breaks, during which the

workers can rest and have something to eat and drink, is indisputable; a shift of seven or eight hours could not be worked without an interval.

These breaks are often taken when the work has to be stopped for technical reasons (shot-firing, waiting for trucks or material, etc.). In some cases the worker takes his break individually, without a stoppage of production. Several *Czechoslovak* collective agreements contain stipulations of this sort. In other cases breaks are taken collectively, and do involve a stoppage. Under *French* legislation, the break may be taken together by the men at a given workplace or by a given class of workers; but the collective agreement for the Northern coalfield (Anzin, Nord and Pas-de-Calais) restricts this provision, and stipulates that save in exceptional cases breaks must be taken together by all the men at the workplace, without subdivision according to class of worker.

The length of the regulation break is sometimes fixed by legislation or agreement. This is the case in *Australia* (30 minutes), in some *British* districts (15 or 20 minutes; only 10 minutes on Saturdays in some of these districts), and in *France* (25 minutes). Further, French legislation lays down that the break should be taken all at once, or exceptionally in two parts; the collective agreement for the Northern coalfield stipulates that it shall be taken all at once.

There are, however, a few cases in which breaks are not included in the time spent in the mine. This applies to the underground lignite mines in the outer districts of the Central *German* coalfield, and to *Spain*. In the latter country the standards of employment in force in the province of Oviedo state that half the breaks (which last for 30 minutes) shall be counted as time spent in the mine.

Interruptions due to causes outside the worker's control, and imposed by technical requirements, are always included in the time spent in the mine. This is specifically laid down in the *Spanish* and *Yugoslav* regulations. In *Italy* interruptions due to falls of roof, etc., failure of electric current, and flooding are included in hours of work if they do not exceed 30 minutes; beyond this limit the worker is entitled to his wages for each hour during which he remains at his workplace by order of the management.

3. LIMITS TO TIME SPENT IN THE MINE

The review of the situation given above shows that the limits placed on time spent in the mine depend partly on the method of

calculation used. An 8-hour shift, for instance, may denote widely different times in the mine according as it is calculated individually or collectively—and in the latter case according as it includes both winding times, or only one, or neither. It may thus correspond, for each worker, to a period in the mine greater than, equal to, or less than 8 hours; and it is impossible to say what period in the mine a given shift denotes unless the method of calculation is also indicated.

The periods usually taken as a basis for fixing the number of hours of presence in the mine are the day and the week. The one or the other is sometimes taken as sole basis, the regulations either choosing directly between them or leaving the choice free. On the other hand, they may apply simultaneously, in which case the daily and the weekly limit must both be respected.

Nevertheless, it should be noted that a weekly limitation of working hours, even though not specified, may be reached indirectly by applying a weekly rest scheme which in practice limits the number of shifts per worker to six in the week, or by fixing the number of weekly working days or shifts (5-day or 6-day week; or in some cases the 5-day and 6-day week alternately, with 11 shifts in each fortnight).

Apart from continuous operations, which will be dealt with later, the calculation of hours of work over periods longer than the week is quite exceptional and applies to special operations or groups of workers only.

The maximum limits laid down by national regulations for time spent in the mine are classified below in three groups, according to the method of calculation used. In each group the limits for hours of work are arranged according to the periods on which they are based (day, week, day or week, day and week, day and fortnight).

(a) *Individual Calculation; Collective Calculation equivalent to Individual Calculation*

As has been stated, the method of collective calculation which includes one winding time is equivalent to the individual method. The same applies when the shift includes both winding times, but the group of workers to which the calculation applies can be transported together in the same cage.

Daily Limits

10 hours: Japan.

9 hours: *Germany* (in the Rhineland and Westphalia coalfields, technical staff, average calculated over the month, the ninth hour being paid for at a wage increase of 15 per cent.).

8½ hours: *Germany* (outer districts of the Central German lignite field).

8 hours: *Austria, Canada* (Alberta and British Columbia), *Germany, Netherlands* (6-hour shift on Saturdays).

7 hours: *U.S.S.R.*, where, however, a very large number of workers are covered by the provisions of the Labour Code, which reduce hours to 6 in the day for persons employed on underground work; see the lists of occupations drawn up by the People's Commissariat for Labour (whose duties were taken over by the Central Council of Trade Unions in 1933).

Weekly Limits

48 hours: *Turkey*;

40 hours: *France* (supervisory staff).

Daily or Weekly Limits

8 hours a day or 48 hours a week: *Czechoslovakia, Rumania*. In a few lignite mines in Czechoslovakia, weekly hours are reduced to 46 by making the Saturday shift two hours shorter.

Daily and Weekly Limits

8 hours a day and 48 hours a week: *Austria, Hungary, Yugoslavia* (mines in which the workers do not travel in cages). In Austria the weekly limitation applies only when hours of work are unevenly distributed over the different days of the week.

7½ hours a day and 45 hours a week: *Belgium, Poland*.

8 hours a day and 40 hours a week: *Italy, New Zealand*. In certain New Zealand mines, when work has to be done on Saturdays (development, repair or maintenance work) the shift is one or two hours shorter.

7 hours a day and 40 hours a week: *Spain*.

7¾ hours a day and 38 hours 40 minutes a week: *France*.

In the *Union of South Africa*, in the Transvaal, the hours of white miners employed underground are usually 8½ in the day for the first five days of the week and 5½ on Saturdays, i.e. 48 hours a week; in Natal the usual shift for these workers is about 9 hours.

(b) *Collective Calculation including Both Winding Times*

9 hours a day and 6 days a week, i.e. 54 hours a week: *India*.

8 hours a day and 48 hours a week: *Australia* (6 hours on Saturdays), except Western Australia; *Yugoslavia* (mines in which the workers travel in cages). In the Australian State of New South Wales, it is the general practice to produce coal on 11 shifts a fortnight, 10 of 8 hours each and a 6-hour shift on alternate Saturdays, the weekly average thus being 43 hours. -

7 hours a day: *Australian State of Western Australia* (except for pumpers); the practice of not working on alternate Saturdays gives a weekly average of $38\frac{1}{2}$ hours; when the second Saturday shift (usually idle) is worked, 5 hours constitute a full shift on that day.

(c) *Collective Calculation including Neither Winding Time*

8 hours a day: *China*. In practice it would appear that the time spent in the mine by each worker may exceed the regulation limit by about 2 hours, since as a rule this limit includes neither descent nor ascent nor work relating to the changing of shifts. The individual time spent in the mine appears to vary between 8 and 12 hours a day.

$7\frac{1}{2}$ hours a day: *Great Britain*. The working of a shorter shift on Saturdays involves a reduction in weekly hours; this reduction, which varies in length from district to district and according to the class of worker, sometimes amounts to half a shift. For hewers in Northumberland and (usually) for hewers and fillers in Durham it is obtained by working on alternate Saturdays only. In some mines of the Bristol district, hours of work are reduced on Saturdays by the use of a different method of calculation, winding time (up) being included in the shift.

§ 3. — Time Spent at the Workplace

In certain countries—the *Canadian* Provinces of New Brunswick, Nova Scotia, and Saskatchewan, *Chile* (particularly for submarine coal mines) and the *United States*—the maximum limits for hours of work apply to the time spent at the workplace—a conception which closely resembles that of actual work. Hours are counted individually for each worker from the moment when he arrives at his workplace until the moment when he leaves it; the time required for underground travelling, including winding time, is thus excluded. In the bituminous coal mines of the *United States* the average length of travelling and winding time was estimated in 1933 at 54 minutes per shift. Moreover, in that country time

spent at the workplace does not include meal breaks—usually 30 minutes in length, except in some mechanised mines, where only 15-20 minutes are taken—but it appears that the ordinary practice is for the miners to eat their lunch in the breaks that come in the course of mining, so that the period at the workplace is not thereby extended.

Maximum hours of work at the workplace are fixed at 8 in the day in the *Canadian* Provinces of New Brunswick, Nova Scotia and Saskatchewan, and 7 hours a day and 5 days a week (35 hours a week) excluding meal breaks in the *United States*; but under the Anthracite Agreement of the latter country six days may be worked instead of five during twelve weeks in any contract year. In practice, the *United States* underground miner usually determines his own hours according to the amount that he wishes to work, and it has been estimated that in general he works nearer to 5 or 6 hours a day than to 7.

In *Chile*, according to information supplied by the Government of that country in its reply to the questionnaire which the Office sent out when preparing for the 1936 Session of the Conference, the time lost in the submarine mines in travelling from the entrance of the adit to the working face (estimated at an hour in each direction) is not included in hours of work, and the workers thus remain 8 hours a day and 48 hours a week at the workplace. The coal extracted from these mines accounts for 90 per cent. of the national output.

It may be added that in *Great Britain* hours of work are calculated at the workplace in exceptional cases (where the work of sinking a pit or driving a cross-measure drift is being carried on continuously); in this case the only limits are that the number of hours spent by the worker at his working place may not exceed 6 and that the interval between the time of leaving the working place and returning thereto may in no case be less than 12 hours.

In certain mines in *Hungary* travel-time in underground adits, particularly in those leading to inside shafts, is not counted in the 8-hour shift.

In the *U.S.S.R.* an Order of the People's Commissariat for Heavy Industry, dated 10 July 1936, provides that in order to improve the organisation and preparation of work, shifts must be changed at the workplace, and hours of work calculated from the moment when the workers arrive there. But the adoption of this method of calculation seems to be connected with the new system of organising mining work and the mechanisation of the transport

of miners to the face, which was to be introduced in 1937; it would appear, therefore, that the calculation of hours as at the workplace is in course of introduction in the Soviet Union.

SURFACE WORKERS

The position of surface workers (manual, non-manual, and technical) as regards hours of work does not appear to raise any problem of a special nature distinguishing it from the position of industrial workers generally.

§ 1. — Definition of Normal Hours of Work

The expression "hours of work" is seldom exactly defined in respect of surface workers. The regulations use "hours of work", "normal hours of work", and "hours of actual work", but it is rare to find a statement of the meaning of these terms, particularly as regards the last of the three. Nevertheless it is generally recognised, sometimes owing to official interpretations or judicial decisions, but more often implicitly, that hours of work mean the time during which the worker is at the employer's disposal, i.e. the time during which he is engaged according to the time-table the employer has drawn up under the regulations.

In some countries hours of work mean the time spent by the employed person at his workplace. In the *United States* the general collective agreements concerning bituminous coal and anthracite mines respectively state that the limits apply to work done at the usual workplace. In *Poland* hours of work mean the number of hours during which the worker is required by his contract to remain at the disposal of a foreman inside or outside the establishment.

Few regulations mention clearly whether the various acts of a personal nature which take place before or after work—changing clothes, washing, bathing, checking in or out, etc.—are or are not included under hours of work. In the Central *German* lignite mines these operations are excluded; so is, in *Yugoslavia*, the roll-call before the beginning of the shift. On the other hand, in *Austria* hours of work include the time required for the roll-call, the issue of tools and explosives, and the drawing of pay. In *Japan*, according to a circular of the Bureau of Social Affairs "the few minutes spent in going to the workplace before starting work, at the

orders of a superior, or in the direct preparation of work" are counted in hours of work as being "time necessary for the preparation of work".

In practice it would appear that the beginning and end of spells of work are marked by a signal, and that the period between these signals—after deduction of any breaks excluded by regulations—constitute hours of work. For instance, the *Spanish Act* states on this point that for surface work the day shall be counted from the roll-call or the signal for the start, in whatever form this is given, until the end of work at the workplace, excluding regular breaks but including interruptions required for technical reasons.

BREAKS AND INTERRUPTIONS OF SERVICE

Workers may be authorised to stop work in the course of the day. Short breaks of 5, 10 or 15 minutes, spent at the workplace, are usually counted in hours of work. Longer breaks, particularly when the workers leave the workplace, are not included; this applies above all to the midday interval, when work is done in two spells. Long breaks are usually provided for in the time-table.

The criterion for distinguishing between breaks included in hours of work and those excluded would thus appear to reside essentially in the existence or non-existence of a relation of dependence between worker and employer during the break.

The regulations of most countries—*Australia* (Western Australia), *Chile*, *China*, *Czechoslovakia*, *Great Britain* (except a few districts), *Germany*, *Hungary*, *India*, *New Zealand*, *Rumania*, *Spain*, *Turkey*, *United States*, *U.S.S.R.*, and *Yugoslavia*—state that rests and breaks for meals shall not be counted in hours of work. In practice the position is the same under regulations like those of *Belgium*, which limit the hours of actual work. In a few other countries, *Austria* and *Poland* for instance, the regulations exclude from hours of work any breaks provided for in the time-table.

On the other hand, a number of regulations state that short breaks for refreshment (sometimes called "crib time") shall be included in hours of work. In *Australia*, for instance, breaks are included in engine-drivers' hours; and in New South Wales crib time of 30 minutes is usually included in working hours. In *Czechoslovakia*, where the Act provides that a break of at least a quarter of an hour must be given after not more than 5 hours' uninterrupted work, the parties may agree that breaks shall be counted in hours of work. In practice collective agreements

provide that a break of a quarter of an hour given after 4 or 5 hours' work shall be included in hours and that if the break exceeds a quarter of an hour, working time shall be increased by the same amount; on Saturdays the break is included only if no breakfast interval has been allowed during the hour preceding the time at which the break is normally due. In *Great Britain* breaks are included in hours of work in the districts of Cannock Chase, Leicestershire, Forest of Dean, and North Wales. In *Japan* the hours of women workers, which may not exceed 11 in the day, must include half-an-hour's rest if not less than 6 hours are worked, and 1 hour's rest if not less than 10 hours are worked.

Several schemes fix the time at which a break must be allowed, whether or not it is to be included in hours of work. In *Australia* it is specified in some cases that a break must be given not less than $3\frac{1}{2}$ and not more than $4\frac{1}{2}$ hours after the commencement of the shift. In the *U.S.S.R.* a break of not less than half an hour and not more than 2 hours must be given 4 hours at the most after the beginning of the shift. After 5 hours' work a break of half an hour must be allowed in *China* and at least a quarter of an hour in *Czechoslovakia*. In *India* and *Poland* workers must have at least an hour's rest after not more than 6 hours' work.

Interruptions due to causes beyond the worker's control and not provided for in the time-table are as a rule included in hours of work. The *Spanish* and *Yugoslav* regulations contain specific provisions on this point. In *Italy* the provisions already mentioned in this connection with regard to underground workers also apply to surface workers (see p. 43).

§ 2. — Limits to Normal Hours of Work

1. PERIOD BY WHICH HOURS ARE LIMITED

As has already been indicated for underground workers, hours of work in the mine may be limited by the day, the week, the day or the week, or the day and the week; a weekly limitation may also be obtained indirectly by fixing the number of working days in the week or applying a weekly rest scheme. In some instances, but relatively seldom, hours of work are limited on a fortnightly basis, so as to make one Saturday in each fortnight free. It is only for a few classes of workers that the hours of work in

the mine are calculated over periods longer than those just mentioned.

Hours are limited *by the day* in *Australia* (Victoria and Western Australia), *Austria*, *Canada* (Saskatchewan), *China*, *Germany*, *Great Britain* (South Wales and Monmouthshire, winding engineers in all districts), *Japan*, *Netherlands*, *Poland* (Upper Silesia), and the *U.S.S.R.*

Limitation *by the week* is customary in *Australia* (New South Wales, and mining engineers in Western Australia), *Great Britain* (except one district), and *Turkey*.

The day or the week is taken as the basis for limiting hours in *Czechoslovakia* and *Rumania*.

Limitation *by the day and the week* is prescribed in *Austria*, *Belgium*, *Canada* (British Columbia), *France*, *Hungary*, *India*, *Italy*, *New Zealand*, *Poland*, *Spain*, the *United States*, and *Yugoslavia*. In *Austria* the weekly limitation applies only when hours are unevenly distributed over the different days of the week.

2. MAXIMUM LIMITS

The national schemes in force, whether legislative or embodied in some other form of regulation, lay down the following limitations, which are classified here according to the period taken as the basis of calculation:

Daily Limits

11 hours: *Japan* (women; includes rests).

10 hours: *Japan* (men; limit generally fixed according to instructions contained in various circulars of the Bureau of Social Affairs).

9 hours: *Germany* (in the coalfields of the Rhineland and Westphalia, technical workers; the ninth hour is paid at 15 per cent. above the normal rate).

8-10 hours: *Germany* (8 hours according to the legislation, 8-10 hours according to the collective rules, varying by coalfields, by categories of work, and by the organisation of the work. In general the ninth and tenth hours are paid at 15 per cent. above normal rates, or 10 per cent. for workers whose duty consists mainly in being in attendance).

8 hours: *Australia* (6 hours on Saturdays as a rule), *Austria*, *Canada* (British Columbia and Saskatchewan), *China*, *Great*

Britain (South Wales and Monmouthshire, winding enginemen in all districts), *Netherlands*¹, *Poland* (Upper Silesia), and *Spain* (salaried employees). In the Australian States of Victoria and Western Australia, the relevant Acts prescribe an 8-hour day for persons in charge of any machinery except sinking pumps, borers and coal-cutting machines. In China, it would appear that in practice hours of work lie between 9 and 12 in the day. In Great Britain, the hours of winding enginemen may be up to 10½ a day if only a single shift is worked.

7 hours: *Australia*, in Western Australia (except grooms, who work 8 hours); further, in practice every second Saturday is free, and when it is worked, 5½ hours count as a full shift.

Weekly Limits

48 hours: *Germany* (salaried employees), *Turkey*.

From 44 hours excluding breaks to 49 hours including breaks: *Great Britain*.

43 hours: *Australia*, in New South Wales (mechanics); in fact the 43-hour week seems to be the usual scheme for all classes of workers, subject to the possibility of working overtime.

42 hours one week and 40 hours the next, giving an average of 41 hours a week: *Australia*, in Western Australia (mining engineers).

Daily or Weekly Limits

8 hours a day or 48 hours a week: *Czechoslovakia*, *Rumania*. In Czechoslovakia, weekly hours in certain lignite mines are reduced to 46 by shortening the Saturday shift.

Daily and Weekly Limits

8 hours a day and 48 hours a week: *Austria*, *Belgium*, *Chile*, *Hungary*, *Italy* (salaried employees), *Poland*, *Yugoslavia*. In Austria, the weekly limitation applies only when hours of work are unevenly distributed over the different days of the week.

In the *Union of South Africa*, white surface workers have a 48-hour week, with 8½ hours on the first five days of the week and 5½ hours on Saturdays.

8 hours a day and 44 hours a week: *Spain*.

8 hours a day and 40 hours a week: *France*, *Italy*, *New Zealand*. In France, as regards office staff, the 40 weekly hours may be

¹ According to information supplied by the Government of the Netherlands in 1930, hours of work in open lignite mines were 10 per day and 58 per week.

distributed evenly over five days of the week (8-hour day) or over the six working days of the week (day of 6 hours 40 minutes), or unevenly over the six working days.

7 hours a day and 35 hours a week: *United States*. For workers in "strip" anthracite mines, an 8-hour day is worked; further, in the anthracite mines, workers may be employed for six days a week in any twelve weeks of the year.

Shorter Hours on Saturdays

In *Australia*, and in certain lignite mines in *Czechoslovakia*, hours of work are usually shorter on Saturdays. In the *U.S.S.R.* a 6-hour day is worked on the eves of rest-days and public holidays, but this provision does not apply to establishments which have adopted the system of continuous work. These reductions involve a shorter working week. It will be seen below that there are also possibilities of reducing hours on Saturdays without shortening the working week.

B. — DISTRIBUTION OF NORMAL HOURS OF WORK

Hours of work are most often distributed over the week, sometimes over the fortnight, and occasionally over a longer period.

§ 1. — Distribution over the Week

The information given in the previous section of this chapter shows that for each employed person a shift usually falls on each working day of the week, except for necessarily continuous operations. There is, however, at present a pronounced tendency to reduce the number of weekly shifts to five and thus to allow the miner two days' rest a week. Such is the practice in *France*, *Italy*, *New Zealand*, and the *United States*.

In *France*, hours of work must be distributed over five days in the week so that the workers have a weekly rest-day in addition to Sunday. This additional day must be the same for all the workers in a given mine or pit, except persons employed exclusively in maintenance or safety work, who are entitled to time off in compensation. For underground workers, distribution over six days

may be authorised in exceptional cases by Ministerial Decree, and if such authorisation is given, the hours of the surface workers must also be distributed over the six days; the collective agreement for the Northern coalfield, however, states that use will not be made of this provision until the question has been re-examined. Further, the Chief Inspector of Mines, after consulting the employers' and workers' organisations concerned, may authorise work in rotation in a mine or pit, in such a way that operations are carried on every working day, provided that neither the shifts in any section of the mine nor the individual workers work more than $7\frac{3}{4}$ hours a day and 5 days a week. For office staff, hours may be 8 in the day for five days, with an unbroken rest of 48 hours, including Sunday, or 6 hours 40 minutes on each of the six working days, or 40 hours a week unevenly distributed over the six working days, provided in this last case that there is an unbroken rest of 40 hours including Sunday. The hours scheme must be the same for the whole office staff of a given service.

In *New Zealand* hours of work are 8 a day for the first five days of the week. On Saturdays necessary development, maintenance and repair work may be done. In certain cases the Saturday shift is reduced by an hour or two hours.

In the *United States* work may be done on any five days of the week, except certain recognised legal holidays. Further, the Anthracite Agreement provides that the five-day week only applies to staff and may not be considered as limiting the operation of the mine or the hours for working the coal-cutting machines. Work on Saturdays is restricted as much as possible, but the agreements containing such a provision state also that Saturday work shall not thereby be prevented when rendered necessary by holidays, unavoidable shut-downs, trade conditions, double shifts or rotation of work.

In a number of countries, the sixth (Saturday) shift is shorter than the others. This is the case in *Australia*, in a considerable number of *British* districts, in certain lignite mines in *Czechoslovakia*, and in the *Netherlands* for underground work in the bituminous coal mines. This practice involves a shorter working week.

On the other hand, the regulations of several countries provide for the possibility of reducing hours on Saturdays without a corresponding shortening of the working week. This is the case in *Austria*, *Belgium*, *Canada* (British Columbia and Nova Scotia), *Chile*, *Czechoslovakia*, *Poland* (Upper Silesia), *Rumania*, and *Yugoslavia*. In the *Union of South Africa* (Transvaal), white

workers have a 48-hour week, though on Saturdays the shift ends three hours earlier than on other days.

§ 2. — Distribution over the Fortnight

In a few countries hours are spread over the fortnight in order that there may be a whole day free during this period. Eleven shifts are then worked in the fortnight (six one week and five the next), the result being a reduction in average weekly hours. This is the practice in *Australia* (New South Wales and Western Australia) and in some *British* districts (Northumberland and Durham) for certain groups of underground workers.

The spreading of normal hours over the fortnight may have a different object—that of making the regulations more flexible. This is the case in *Austria*, where the hours of carters, motor drivers, grooms, messengers, mine railway staffs, persons engaged in the distribution of goods for consumption and all other persons employed in mines whose working time cannot be exactly limited, are calculated at the rate of 96 hours a fortnight.

§ 3. — Distribution over Other Periods

Distribution of hours over periods longer than a fortnight is rare and applies only to clearly defined operations and groups of workers. In *France* hours of work may be distributed over not more than four weeks for the staffs of maintenance, cleaning and safety services, persons engaged in the loading and unloading of trucks and boats, the staffs of mine transport services (by rail, road or water), and persons required to prepare the periodical wage accounts. In *Germany* the hours of technical staff employed underground are calculated on a monthly average. In *Italy* hours may be spread over six weeks for operations ancillary to underground work and services closely related thereto when work is indispensable, with a weekly limit of 48 hours.

In *Poland*, the general provisions regarding road transport state that the hours of work of persons employed in the transport, delivery, loading and unloading of goods may be calculated at the rate of 624 hours in each period of 13 weeks, provided not more than 10 hours are worked on any one day. In the *U.S.S.R.* the hours of persons engaged permanently on repair work may be calculated by the month.

C. — MAKING UP LOST TIME

For reasons of various sorts—accidents, bad weather (in surface work and open mines), installation of new plant, national and local holidays—production has sometimes to be stopped and shifts are therefore lost. It may happen that both the employers and the workers wish to make up these shifts, the former in order to maintain the volume of output (particularly in countries where hours have been reduced) and the latter in order not to lose their wages.

§ 1. — Cases in which Lost Time may be made up

In *Austria* the collective agreements permit the making up of time lost through bad weather.

In *France* time lost owing to collective stoppages for legal holidays or local festivals or through accidents may be made up, as also time lost for other reasons if the Chief Inspector of Mines gives his authorisation. For surface workers, mention is also made of stoppages owing to failure of power, insufficient means of transport, and bad weather.

In *Italy* time lost owing to *force majeure* or stoppages may be made up.

In *Germany* and *Poland* lost time may be made up, there being no provision relating to the cause of the loss.

In the *United States* some agreements provide that cutting by a machine crew may continue sufficiently long to enable time lost on account of mechanical trouble or power failure to be made up. Further, days lost (particularly by reason of public holidays) may be made up during the same week provided not more than five shifts are worked. Other agreements state that when, in a mine operating on the first five days of the week, a shut-down becomes necessary with $3\frac{1}{2}$ hours or less of operation, the remainder of the week's working time may be made up on the sixth day.

§ 2. — Methods of making up Lost Time

It is clear that when lost time is made up, the normal hours on the day or week in question will be exceeded; and where—

the case—the regulations lay down limits for daily work, work in excess of these must be authorised time may be made up. The regulations in this not only with the possibility of working in excess weekly limits, but in most cases also with the conditions which these additional hours may be worked, and the maximum number and the period within which

extension allowed is fixed at one hour a day or, as the case may be, in *France* and at one hour a total hours of work, including the extension, may vary in *Poland* and 10 a day in *Austria*.

Within which lost time may be made up is two weeks in *Italy*. In *Germany* lost time may be made up over the subsequent week, and in *Poland* in the three

for underground work, the period varies with the time to be made up; one extra shift may be worked over the following week, two shifts within the week and over the following week, three shifts within the week and three following or more shifts within the week and five following for surface workers, the periods are almost identical, but in addition that at workplaces where bad weather causes a collective stoppage, the mines inspector, if the management or the workers, may authorise additional hours at certain periods of the year, provided the number of additional hours does not exceed 80 in the year. The agreement for the Northern coalfield states that this is applied to quays, quarries, depots, coal-washing yards, and building and excavation sites. To the periods in question, the number and distribution of hours authorised for making up this lost time and the conditions to which the authorisation shall apply, agreed between the employers' and workers' representatives concerned. Hours of actual work may not then be more than 1 hour a day and 6 hours a week. Further, in employment in an occupational group, the mines inspector spends all making up of lost time for the group. It is noted that the permission to make up lost time is only to collective stoppages and not to individual stoppages. *German* and *Polish* regulations explicitly state that only for undertakings or parts of undertakings.

Making up lost time is sometimes permitted automatically and sometimes in accordance with a special procedure. In *France* time lost for other reasons than those specified may not be made up without the authorisation of the Chief Inspector of Mines; for surface work, a manager desiring to take advantage of the provision relating to the making up of lost time must notify the mines inspector or apply for his authorisation as the case may be, indicating in either instance the nature, causes and date of the collective stoppage, the number of hours lost, the changes which he proposes to introduce temporarily in the time-table with a view to making up these hours, and the number of persons to whom the changes would apply. In *Italy* lost time may be made up on the basis of agreements between the occupational organisations concerned. In *Poland* the management must inform the factory inspector of its intention to make up lost time, indicating the days and hours lost, the intended time-table, and the number of workers who would be affected.

D. — CONTINUOUS OPERATIONS

§ 1. — Definition

A preliminary distinction must be made between two sorts of continuity in mining work, namely, continuity in the operation of the mine and continuity in certain kinds of work. Many mines are operated in three shifts, at least one and sometimes two of which are given over to the hewing and transport of coal, while the other (or others) are used for development, maintenance and repair work. But though the groups of workers concerned spend consecutive periods in the mine, the shifts are in fact mutually independent, for apart from a few exceptions the work can be interrupted and indeed sometimes consists of different operations from shift to shift. Apart, therefore, from these special cases, operations at the different workplaces stop when a shift leaves and start again when the next shift arrives, there being as a rule no technical reason why a link should be kept up between the two. In fact, such work cannot be assimilated to the operations in industry which necessitate the organisation of successive shifts.

Nevertheless, there are services (though they occupy a very small proportion of the total working force of a mine) which must be carried on continuously or nearly so. The most important of

these are the production of power, pumping and ventilation, supervision, and often also the shaft service. Again, there are wide differences, dependent on the conditions in which the mine is worked, between the operation of these services themselves. Certain pumps and fans work continuously, day and night, weekdays and Sundays, while others can safely be stopped or left unattended for a certain time, and others again only work intermittently or when the need arises.

Some of these services—most of them, indeed—operate at the surface, but there are others underground, particularly the pumping and ventilating services and those for supervision and safety work. It is, however, relatively rare for pumps and fans placed underground to work uninterruptedly.

The regulations in some countries state exactly which operations are regarded as necessarily continuous in character.

In *Belgium* the following are so considered, in all industries: production of the power (steam, electricity, compressed air) required for continuous processes in the industry; minding of fires which cannot be lighted and extinguished daily; watchkeeping (plant and premises); and health and first-aid services in so far as continuous operations necessitate these; and, more particularly in the mining industry: work necessitated by pumps and fans operating continuously; work necessitated by the repair of shafts and levels which require constant maintenance, the shaft service in shafts which for safety reasons must be available at all times; boring at great depths; and processes for the congelation of earth in the sinking of shafts.

In *France* the collective agreement for the Northern coalfield considers power stations, coke ovens, chemical works, generators, boilers, pumps and fans as units in continuous operation.

In *Italy* the principal operations regarded as necessarily continuous are the working of pumps and machinery for ventilating levels and the construction of levels when, in the opinion of the corporative inspector, the state of the ground requires continuous work either in the interests of safety or with a view to satisfactory completion of the job.

In the *United States* the working of power stations and substations and the working of pumps are particularly specified as continuous work in coal mines.

In *Yugoslavia* work considered as necessarily continuous is determined, at the employer's request, by the competent authority in agreement with the appropriate Chamber.

§ 2. — Methods of Organisation of Continuous Work

Work which must be carried on continuously requires an unbroken succession of shifts, day and night, weekdays and Sundays. Among the schemes in use, the commonest provide for three 8-hour shifts, or four 8-hour shifts. The system of three 8-hour shifts sometimes involves the employment of additional or relief shifts.

The hours at which the shifts work are periodically changed, so that each shift shall not always be on at the same time and particularly not always at night. The *Chinese*, *Italian*, and *Yugoslav* regulations make an obligation of this periodical change-over, which is in fact everywhere the normal system.

It is also the normal practice to give all workers a weekly rest, falling on Sunday for each shift in turn. For this reason the change-over of shifts usually occurs on Saturday or Sunday.

With the system of three 8-hour shifts, where a relief shift is not employed, the change-over is operated either by leaving each shift on duty for two successive periods (double shift) or by having a period of work done, half by the shift already on duty and half by that relieving it. The former method is used in *Germany* and in *Poland* (Upper Silesia), where hours of work may be increased to 16 once a week, provided the workers in question have two unbroken rests of 24 hours each in every three weeks.

In *Great Britain*, too, winding enginemen working on a three-shift system do either one 16-hour spell, or one of 12 hours, or two 8-hour spells in the same day.

In *Australia* and *Canada* (British Columbia, Nova Scotia, and Saskatchewan) the regulations permit additional hours for the change-over of shifts, but these are not considered as overtime.

The *French* legislation contains similar provisions regarding underground workers whose presence is indispensable for the operation of pumps, fans and compressed-air apparatus, provided that the average time spent in the mine, calculated over a period of three months, does not exceed 42 hours a week; but the collective agreement for the Northern coalfield prohibits overtime for the change-over and stipulates that as a rule the work schedule shall be based on a four-week period beginning on a Tuesday, with four shifts of workers, each doing three series of seven 8-hour shifts—the first series in the morning, the second in the afternoon, and the third at night—with an unbroken rest of 72 hours after each such series. In *Japan*, where some continuous operations are done

in 12-hour shifts, hours may be increased to 18 (a shift and a half) for the change-over.

§ 3. — Limits to Hours of Work

It follows from the above that the organisation of continuous work requires hours to be averaged over periods of several weeks and sometimes involves longer working time than the normal.

In many cases hours are fixed at an average of 56 a week over a period of three weeks; this is the practice in *Austria, Belgium, New Zealand, and Poland*. In Belgium hours are frequently reduced to 54, 52 or 50 in the week by the omission of certain shifts on Sundays or by the employment of additional shifts.

In *Great Britain* the hours of winding enginemen may be 56 in the week, averaged over a period of three weeks; for continuous operations on the surface, several agreements simply limit hours to 8 in the day. The daily hours of presence in the mine may be extended to 8½ hours for certain categories of underground workers engaged in work which, under certain conditions, is of a continuous nature, such as the supervision of pumps and ventilators.

In *Yugoslavia* 60 hours may be worked in the week, but those in excess of 48 count as overtime; the workers in question must receive a whole Sunday free in every three weeks, as well as a compensatory annual holiday of as many days as the Sundays on which they have worked during the past year.

In *Rumania* hours of work may not exceed an average of 48 in the week, calculated over a period of three weeks.

In the countries which have introduced the 40-hour week, hours of work for continuous operations are fixed at a weekly average of 42. In *France*, for surface workers, the average may be calculated over a period of twelve weeks, provided that daily hours in no case exceed 8 and that each worker has an unbroken rest of 24 hours in every week; as regards continuous operations underground, an extension of half-an-hour a day and 2½ hours a week is generally allowed, but for persons whose presence is indispensable for the work of pumping, ventilating, and compressed-air stations, actual presence at the workplace may amount to 8 hours a day provided it does not exceed 42 hours a week averaged over a period of three months.

In *Italy* the weekly average of 42 hours may be calculated over periods of four weeks.

In the *United States* the Bituminous Coal Agreement provides that the hours of persons employed in power houses and substations operating continuously, or on other continuous work, shall be 8 a day and 40 a week. The Anthracite Agreement states that the hours of persons employed on continuous work, when and as this is necessary, shall be 8 in the day.

§ 4. — Special Provisions for Continuous Work Underground

When continuous operations are done underground and the shifts have to be changed at the actual workplace, allowance must be made for the underground travelling from the shaft to the workplace and back. Thus, if work is organised in 8-hour shifts at a place situated a quarter of an hour away from the bottom of the shaft, and the change must be at the workplace, the time spent by each shift in the mine will be 8 hours plus a quarter of an hour for travelling in each direction, i.e. $8\frac{1}{2}$ hours in all. The changing of shifts at the workplace may be required for technical reasons, and sometimes it is formally required by regulation. This is the case in *China* and the *U.S.S.R.* As has just been said, the same applies in *France* to the persons whose presence is indispensable for the working of fans, pumps and compressed-air apparatus; their period of actual presence at the workplace is fixed at 8 hours a day¹.

Again, the time spent in the mine must be increased on the day of the change-over of shifts, unless—as in *Czechoslovakia*—the work in question is done by persons usually performing other tasks. In *France* the prescribed limits may be exceeded in the case of persons whose presence is indispensable for the working of pumps, fans, and compressed-air apparatus, but for each member of these groups the average time spent in the mine (calculated over a period of three months) may not exceed 42 hours a week; this is in fact not an extension of hours but a method of distributing hours over a period longer than a week.

E. — WORK IN UNHEALTHY OR DANGEROUS WORKPLACES

In some workplaces, mostly underground, the conditions in which work is done are unhealthy, dangerous or particularly

¹ See also the information supplied by the Governments of Belgium and Great Britain on this subject, p. 157 *et seq.*

arduous; high temperature, poisonous gases (carbonic acid gas, carbon monoxide), insufficient ventilation, dust-charged atmosphere, dripping water, flooded or muddy levels, and narrow seams are the principal causes. Long and regular presence in such workplaces may endanger the lives of the workers. A large number of national schemes have therefore provided in more or less exact terms that normal hours should be shorter in these places than where work is done under ordinary conditions.

§ 1. — Definition of Unhealthy or Dangerous Workplaces

The first question which arises is to determine what is meant by an unhealthy or dangerous workplace. The degree of danger to health or safety may vary widely and it is only when a certain point is reached that the workplace is classed by the regulations as unhealthy or dangerous.

As regards *temperature*, a workplace is considered unhealthy when the thermometer registers the following (Centigrade):

28° in *Germany, Poland, and the U.S.S.R.*;

30° in *China, Czechoslovakia (Ostrava-Karvina coalfield), Japan, Netherlands and Yugoslavia*;

32° in *Rumania*;

33° in *Spain*.

According to Czechoslovak legislation, a workplace is unhealthy if there is a permanently high temperature with insufficient ventilation.

The other factors making for danger to health are more difficult to determine in advance for they can hardly be measured with such accuracy.

The presence of *poisonous gases* (carbon monoxide or carbon dioxide) is taken into consideration in *Rumania and Yugoslavia*; impure air or insufficient ventilation in *Germany, Spain* (province of León), the *U.S.S.R. and Yugoslavia*; and the presence of dust in *Spain* (Puertollano mines).

As regards *dampness*, workplaces are declared unhealthy in the following circumstances: when the workers have their feet continually in water or mud (*Spain*); when water is three inches deep (*New Zealand*); or when water causes inconvenience (*Netherlands*). In *Poland* there are special provisions relating to the sinking of shafts when the workers have to wear waterproof clothing as well as to cleaning work done in water or mud. The *Czechoslovak*

regulations refer to dripping water, those of the *U.S.S.R.* to damp and percolation. In *New Zealand* the shorter hours for wet places apply when the workers' clothes are wet through three hours after starting work. In *Germany* (Rhineland lignite mines) hours of work are reduced for hewers employed in damp ditches, and for those employed in open ditches over half a metre deep or in blind shafts over 5 metres high measured from the roof of the level.

In *Poland* a workplace is considered dangerous if the seam worked is either over 8 metres thick or is less than 55 cm. thick and lies at an angle of less than 15° .

In the *U.S.S.R.*, for surface work, hours are reduced to 6 in the day for drawers in coke ovens, winding enginemen at vertical shafts where the same cage is raised loaded not less than eighteen times in the hour, and workers engaged in crushing coal-tar in briquette works. Underground, the list of occupations which are considered as particularly exhausting or dangerous, and for which hours are limited to 6 in the day, include numerous groups of workers such as those engaged in boring and sinking shafts, timbermen and shot-firers in work on vertical shafts and drainage shafts; hewers, cutters, pillar drawers, timber drawers, pushers-on, men operating coal-cutting machines, suspended pumps, etc.

Belgian legislation refers only to "particularly unhealthy workplaces and premises"; that of *France* to "workplaces where conditions are abnormal in respect of temperature or humidity or in other ways"; and that of *Turkey* to "reasons of health".

Sometimes the regulations leave it to the competent mining authority to decide on the unhealthy character of workplaces. In *Rumania* responsibility as to what conditions are unhealthy lies with the employer. In *New Zealand* the worker must notify the manager or "underviewer" of unhealthy conditions; if a difference of opinion arises in this connection, the question is decided by the manager and the workmen's inspectors or, should they fail to agree, by an umpire.

§ 2. — Limits to Hours of Work

The shorter hours at these workplaces are in some cases prescribed by the regulations themselves, while in others it is left to the competent authority (in most cases the mines authority) to lay down a maximum limit; this is the practice in *Austria*, *Germany*, and

Spain (in certain instances). Regulations to administer the Act must be issued by Royal Decree in *Belgium*, by decree of the Ministers of Public Works and Labour in *France*, and by instructions prepared jointly by the Ministries of Economic Affairs and of Health and Social Welfare in *Turkey*. In *Czechoslovakia* the mines administration is required to fix maximum hours after consultation with the management and the workers' delegates.

In some countries time spent in unhealthy and dangerous workplaces is fixed by collective rules or agreements (*Austria, Czechoslovakia, Germany*).

In the Central *German* lignite mines hours of work in hot, damp or ill-ventilated places, in so far as they are not fixed by legislation, are determined by the management in agreement with the representatives of the staff.

Daily hours are reduced to 6 in *Czechoslovakia* (Ostrava-Karvina coalfield), the *Netherlands, New Zealand* ($5\frac{1}{2}$ hours in some mines), *Poland* (temperature of over 28° C.), *Rumania, Spain, U.S.S.R., and Yugoslavia*. In *Poland*, the weekly limit in this case is 36 hours. In the *German* (Rhineland) lignite mines, the daily limits for the hewers mentioned above (p. 64) are $6\frac{3}{4}$ and $7\frac{3}{4}$ hours respectively, a break of 20 minutes being included in each case.

In *Germany* (Ruhr bituminous coal mines) time at the workplace is reduced to 6 hours and time in the mine to 7 hours; but if over half the staff work in unhealthy workplaces the length of the shift is $7\frac{1}{2}$ hours.

Hours of work are fixed at 7 a day and 42 a week in *Poland* (workplaces where the conditions are unhealthy in other respects than temperature) and *Czechoslovakia*.

There are also a few schemes under which all work, except in case of danger, is prohibited when the temperature is too high (42° in *Spain*, 40° in *Czechoslovakia*, 35° in *Japan*).

Further, the regulations of some countries prohibit or limit extensions of hours in unhealthy workplaces. In *Germany* normal hours may be exceeded only in case of urgent necessity or in the public interest or if the experience of several years has shown that there will be no untoward effects; in any case, the extension may not exceed half-an-hour a day. In *Chile* exceptions from hours of work regulations are not permitted on operations which, by reason of their nature, are harmful to the workers' health.

Other regulations provide for special rest periods when work is done in certain unhealthy conditions. In *China* the law covering mines, which is not yet in effect, provides that for work done in

workplaces where the temperature exceeds 30° daily hours of work must be broken up by two rests of over 20 minutes.

It may be added, for information, that some regulations and collective agreements stipulate that the shorter time spent in unhealthy or dangerous workplaces may not involve a reduction in wages, for the worker should not in such a case be held responsible for the reduced output. This is the practice, for example, in *Poland, Rumania, Spain, and Yugoslavia*. In Spain the standards of employment for the Puertollano mines provide that workers paid at piece rates who may not work for more than 6 hours shall receive a wage 12 per cent. above the normal. In *Italy* work in unhealthy workplaces may involve the payment of additional wages.

It may also be interesting to note that the dangerous or arduous nature of mining work was the reason given in *Belgium* for the general reduction in hours for persons employed underground in coal mines; indeed, the Royal Order of 26 January 1937, which reduced the hours of these workers, was issued under the Act of 9 July 1936 instituting the 40-hour week by degrees in undertakings where work is done in unhealthy, dangerous or arduous conditions.

In *Poland*, too, the Order of 20 July 1937, which applies to underground workers engaged in particularly exhausting or unhealthy operations, reduces hours to 7 a day and 42 a week or 6 a day and 36 a week for a large number of workers.

F. — WORK ON SUNDAYS AND PUBLIC HOLIDAYS

In view of the great variety of schemes concerning work on Sundays and public holidays, the two subjects are dealt with separately below.

§ 1. — Sunday Work

Productive work in mines is usually stopped on Sundays. Prohibition of Sunday work is, however, not absolute, and operations which are indispensable for the safety of the mine and its maintenance in a fit state for production, or which can only be done on Sundays, or again which accidents, *force majeure*, etc., make urgently necessary, are permitted on that day.

1. PROHIBITION OF SUNDAY WORK

The prohibition of Sunday work is most often a consequence of provisions relating to the weekly rest. The latter is established either by general legislation concerning all employed persons—therefore including miners—or special legislation applying only to persons employed in mines, or by decrees or administrative regulations, collective agreements, arbitration awards, collective rules (*Germany*) or, lastly, by standards of employment (*Spain*). In Federal countries, legislation may extend to the whole territory or lie within the competence of the States or provinces. In some countries the weekly rest is based on custom; this is particularly the case in *Great Britain*, except for women, who are debarred from working on Sundays under the Coal Mines Act of 1911. The provisions governing this matter are thus extremely varied.

In certain countries Sunday work is absolutely prohibited by law; this is the case in *Austria, Belgium, Canada, the Netherlands, New Zealand, Spain, the Union of South Africa, and Yugoslavia*. In others—*Chile, Czechoslovakia, France, Italy, Poland, and Rumania*—the weekly must rest be given on Sunday. The difference between these two methods of regulation is not great. The legislation of the Asiatic countries does not provide for a rest specifically on Sunday: in *China* the principle of a rest day in each week is laid down; in *India* no person may work for more than six days in the week.

In *Japan* and the *U.S.S.R.* there are special schemes, providing in the former case for less rest, and in the latter for more, than a normal rest day in each week.

2. LENGTH OF STOPPAGE OF PRODUCTION

The period during which production is stopped generally corresponds to the length of the weekly rest. Most schemes define the rest period by fixing the time at or before which it must start and the time at which work may recommence. A period of 24 hours for the weekly rest is usual, but the time at which it is to start varies.

Austrian and *Rumanian* legislation and the collective agreements for the Rhenish-Westphalian coalfield in *Germany* and for the mines of Upper Silesia in *Poland* prohibit work between 6 a.m. on Sunday and 6 a.m. on Monday. The *Canadian, Italian,* and

Spanish legislation provides for a stoppage from midnight to midnight. In *Chile* work must stop between 9 p.m. on Saturday and 6 a.m. on Monday.

In *Czechoslovakia* the weekly rest must last for 32 hours.

The *Spanish* scheme allows for a certain degree of elasticity; it provides that the rest period may be calculated in other ways if the special needs of particular industries so require, provided the length mentioned above is not essentially modified. A similar latitude is allowed by *Italian* legislation, which provides that collective agreements may adopt some other time than midnight for the beginning of the 24-hour weekly rest; and failing collective agreements, the corporative inspectorate may take such action.

In Great Britain it is the general practice in a great many mines to begin the first Monday shift at 10 p.m. on Sunday night. However, a 24-hour rest is in fact observed, because the last man leaves the mine at 7 p.m. on Saturday and work is not resumed until 10 p.m. on Sunday. Moreover, some agreements consider for the purposes of payment, not Sunday work properly speaking, but the work done during the "week-end"—that is, during the period or between the commencement of the Saturday afternoon shift and the commencement of the Sunday afternoon shift. As regards women (who alone are prohibited by law from working on Sundays), work stops from 2 p.m. on Saturday until 5 a.m. on Monday—i.e., for 39 hours.

The *Netherlands* Act provides that workers on the night shift may remain in the mine until the Sunday morning.

3. WORK AUTHORISED ON SUNDAYS

Legislative and other regulations provide or implicitly recognise that certain work must be done on Sundays, or that events may occur making such work indispensable, above all for reasons of safety. Although all regulations are not absolutely clear on the subject, it is the general practice to except the following from the prohibition of Sunday work: work which owing to its nature must be carried on continuously; work connected with the maintenance and safety of the mine (ventilation, pumping, inspection); care of animals; work which cannot be done on other days without interrupting or disturbing production (survey work and certain maintenance and repair work on machinery and other plant); and work which must be done in urgent and exceptional cases (in case of accident, threat of accident, *force majeure*).

The *Austrian* legislation, for instance, gives a particularly significant definition of this work; it provides for the exception of operations which cannot be interrupted, or can only be done when production is stopped; operations rendered urgent by danger involving a serious threat to the life or health of the staff; and operations which must be done with a view to the conservation of the mine and in order to secure continuous production.

4. COMPENSATION FOR SUNDAY WORK

Persons working on Sundays usually receive special compensation for having done so. This may take the form of a compensatory rest, or an increase in the hourly rate of remuneration, or a combination of the two.

(a) *Compensatory Rest*

This form of compensation is prescribed in the legislation of *Austria, Czechoslovakia, France, Italy, Japan, the Netherlands, New Zealand, Poland, Rumania, Spain, the United States, and U.S.S.R.*

The *Italian* Decree lays down that compensation for time worked on Sundays may not be less than 12 hours' rest.

The *Austrian* Act states that persons employed for over 3 hours during the Sunday rest are entitled to an unbroken rest of at least 32 hours during the following fortnight; this rest must include the next Sunday, unless the conditions of production absolutely prevent this.

The *New Zealand* Act provides that persons whose duties require them to go to the mine every day, even for an extremely short period, are entitled to at least twelve half-holidays or six whole holidays a year as special compensation.

(b) *Increased Remuneration*

In a fairly large number of countries the regulations require increased wage rates to be paid for work done regularly on Sundays. Further, a distinction is often made between wages for work of normal length and for overtime.

The increased rates vary widely from country to country and often within a given country according to the class of workers or the district. They range from time and a quarter to double time. Further, as will be seen below, the extra payment is often higher

when the Sunday is also an important religious festival (Easter, Whitsun, etc.)

A rate of time and a quarter is provided in *Germany* for the technical staff of the Rhenish-Westphalian bituminous coalfield and for continuous operations in the Central German lignite field. The same rate is also laid down as a minimum by the *Austrian* legislation. In *France*, for underground workers, the legislation provides that on the second weekly rest day maintenance and safety work—the only work allowed—shall give rise to a rate at least 15 per cent. above the normal for the hours worked, but only when it is impossible to give compensatory time off; the collective agreement for the Northern coalfield provides that a rate of time and a quarter shall be allowed for special service in addition to compensatory time off in the case of maintenance and safety work on Sundays, and that the same shall apply to any special service on Sunday night for urgent work of an exceptional nature. Time and a quarter is also allowed in *Great Britain* (Scotland) for work at the week-end.

An increase of 40-50 per cent. on the normal rate is payable under several *Rumanian* collective agreements for overtime done on the weekly rest day.

Time and a half is payable as follows: in *Australia*, except Western Australia; in *Austria*, under most collective agreements, for the first 8 hours worked; in *Czechoslovakia*, in the Ostrava-Karvina bituminous coalfield for all work normally done on Sundays, provided the workers in question have not missed more than one shift during the last fortnight without good reason, and in most of the lignite mines for overtime on the weekly rest day; in *Germany*, for the whole manual staff of the Rhenish-Westphalian bituminous coalfield and for exceptional work in the Central German lignite field; in *Great Britain*, by a large number of collective agreements, for work done during the "week-end"; in *Hungary*; in *New Zealand*, for regular Sunday work; in *Poland*, for overtime on Sundays; and in Upper Silesia (collective agreement), for all Sunday work.

Time and three-quarters is allowed in *Czechoslovakia* in the Ostrava-Karvina coalfield for overtime on Sundays.

Double time is allowed as follows: in *Australia* (Western Australia); in *Austria*, under most collective agreements, for all work in excess of 8 hours; in *Canada*, as a rule; in the *Netherlands*, for work done outside the usual hours; in *New Zealand*, for work done exceptionally on a Sunday; in *Rumania* (Petrosani and Lonea mines), for work in excess of 8 hours.

In the *British* districts of Nottinghamshire and North Derbyshire certain groups of workers are paid for 7 days' work if they do six shifts in the week, one of which covers part of Sunday.

In *Spain* (provinces of Oviedo and León) work not of an urgent nature is paid at overtime rates without loss of the right to compensatory time off; work of an urgent nature is paid at the normal rate.

In *Yugoslavia* the overtime rate is paid for all work done normally on Sunday or other weekly rest day.

In *Japan* a special high rate of pay is allowed in addition to compensatory time off.

§ 2. — Work on Public Holidays

On the whole, except for certain operations, mines are closed down on a number of public holidays. The provisions on the subject are contained either in general legislation covering all employed persons—and therefore the staffs of mining undertakings also—or in special legislation relating to mines, or in collective agreements or other rules. Often the scheme in force is a combination of legislation, other regulations, and custom.

There is much diversity as regards the days kept as national, regional or local holidays and as religious festivals, and the number of days taken off for this reason varies widely from country to country and even from region to region in any country. A list of these holidays will therefore not be given here; a more important point is the manner of regulating hours of work on such days in the different countries.

The operations authorised on public holidays are generally the same as are authorised on the weekly rest day. The *Austrian* legislation would appear to be among the few regulations that explicitly define the conditions under which the normal work of production is permitted in mines on public holidays. The Order of 6 April 1933 provides that such work is authorised when long and frequent stoppages constitute a danger to the safety of the mine, or when by reason of bad weather production is often held up and hours of work are reduced, or when production has been interrupted by exceptional occurrences; and that the work may be continued until the normal situation is restored. The management of the undertaking must inform the district mining authority,

at least three days in advance, of its intention to have work done on a holiday.

The compensation due for work done on public holidays also varies widely from country to country and sometimes from district to district. As a fairly general rule no increased rate is paid for exceptional work done on a holiday if time off is given as compensation; and, more particularly, regular normal work on holidays gives rise to no increase unless specially stipulated. In certain cases a distinction is made between the different holidays in this respect, or the special rate varies according to the importance of the holiday. Special rates are generally payable on certain principal religious festivals (Easter, Whitsun, Christmas, etc.) Some countries distinguish between work not in excess of the normal limit and overtime. In others again the regulations require a special rate to be paid on legal public holidays only.

The rates applying in a few countries are given below. As for work on weekly rest days, they range from time and a quarter to double time.

Time and a quarter is allowed: in *Austria* (Styrian mines), for work on Corpus Christi Day and St. Barbara's Day; in *Czechoslovakia* (Ostrava-Karvina coalfield), provided the workers have not missed more than one shift during the last fortnight without good reason; in *France* (Northern coalfield), as a bonus for special service for workers required to do urgent work of an exceptional nature at night during festivals; in *Germany*, for technical staff in the Rhenish-Westphalian bituminous coalfield on all legal public holidays, and for work at plant in continuous operation in the Central German lignite mines; in *Great Britain* (Cumberland) on Boxing Day, Easter Monday, Whit Monday and August Bank holiday.

An increase of 35 per cent. on the normal rate is payable in *Czechoslovakia* (Ostrava-Karvina coalfield) for overtime on customary holidays and anniversaries.

An increase of 40-50 per cent. on the normal rate is payable in *Rumania* under the collective agreements for several coalfields.

Time and a half is allowed as follows: in *Australia* (New South Wales), for a 6-hour shift; in *Austria* (Styrian mines), on New Year's Day, Easter Monday, May Day, Whit Monday and Christmas Day; in *Czechoslovakia* in the Ostrava-Karvina coalfield, on 28 October (national festival) and in the lignite fields of North-western Bohemia and Falknov on Christmas Day, May Day, and 28 October; in *Germany* (manual staff in the Rhenish-Westphalian

bituminous coalfield), for legal public holidays other than Easter, Whitsun, and Christmas; in *Great Britain* (Yorkshire); in *Hungary* for holidays; in *Poland* (Upper Silesia), except at Easter, Whitsun, and Christmas.

Time and three-quarters is allowed in the Ostrava-Karvina coalfield of *Czechoslovakia* for overtime on 28 October.

Double time is allowed as follows: in *Australia*, in New South Wales for work in excess of 6 hours; and in Western Australia, except for grooms and pumpers; in *Austria* (Styrian mines), for work in excess of 8 hours; in *Canada*, as a general rule; in *Germany* (Rhenish-Westphalian bituminous coalfield and Central German lignite field), at Easter, Whitsun, and Christmas; in the *Netherlands*, for work outside the normal hours, except at Easter, Whitsun, and Christmas; in *Poland* (Upper Silesia), at Easter, Whitsun, and Christmas; in *Rumania* (Petrosani and Lonea mines), on Easter Sunday, Easter Monday, Whit Sunday and May Day and for any overtime on a holiday; and in the *U.S.S.R.*

The normal rate is increased by 150 per cent. in the *Netherlands* for work outside the normal hours at Easter, Whitsun, and Christmas.

In *China*, under the Collective Agreements Act of 28 October 1930 which came into force on 1 November 1932, a collective agreement may stipulate that wage rates shall be increased when the employer requires the employed person to work or to continue his work on holidays; but in no case may the rate exceed double time. Nevertheless in the Kailan mines, triple time is paid on the lunar New Year holidays.

In *Yugoslavia* work done on holidays, even on a normal footing, gives rise to a special rate of pay.

CHAPTER IV

EXTENSION OF NORMAL HOURS OF WORK

The hours of work specified in the preceding chapter apply in normal circumstances to all the workers employed in coal mines who are covered by the national regulations. There are, however, cases in which the general limits must be exceeded in order to suit the character of certain operations or occupations, or to face emergencies of accidental origin, or again to meet exceptional needs relating to production. Consequently all existing regulations permit the extension of normal hours on more or less clearly defined grounds.

Of the various provisions for extensions, some may be applied as soon as the need is felt, whereas the operation of others is subject to certain formalities and must follow a prescribed procedure.

The realisation that abuse of extensions must be prevented, or otherwise the limitation of hours might become illusory, has led to the inclusion in many regulations of provisions to restrict in various ways the amount by which normal hours may be extended. With this object, as well as in order to compensate the workers whose hours are increased, it is in certain cases provided that work in excess of the normal must be paid at higher rates. But in other cases the undertaking's immediate or exceptional needs may be met by the employment of additional labour; therefore, particularly in periods of depression, regulations are on occasion issued to restrict recourse to certain exceptions and so to favour the engagement of unemployed workers.

Lastly, some regulations provide that in exceptionally serious circumstances the obligation to respect the rules they have laid down may be suspended.

The object of this chapter is to explore the problems raised by the extension of normal hours of work and to examine the manner in which the national regulations have dealt with them. No systematic distinction is made between extensions for underground and for surface workers respectively; but the class of workers will be specified wherever the text of the regulations makes this possible.

A. — GROUNDS FOR EXTENSION

All the regulations provide for the extension of normal hours, but they are not all equally explicit as regards the grounds on which such extension is allowed. There is usually more precision on this point in those—and above all in legislation—which apply only to mines, or still more particularly to coal mines, than in general hours of work regulations which include coal mines in their scope. The reason is that the former permit only such exceptions as are indispensable to meet the peculiar needs of the collieries, whereas the exceptions provided for in the latter are intended to satisfy the heterogeneous needs of all sorts of trades and industries; and consequently the grounds for permissible extension are more numerous and more varied in general regulations than in schemes applying only to mines. It is obvious that for the purposes of this Report the extensions permitted in the special mining regulations are of particular interest.

The grounds regarded as justifying an extension of normal hours are briefly as follows.

First of all, the limits laid down for general purposes do not enable the requirements of certain specified operations and occupations to be taken into account. Several regulations therefore fix longer maximum hours for specified classes of work or of workers than those applying to the remainder; other regulations achieve the same result by permitting normal hours to be exceeded, for these classes of workers, on a permanent basis. In either case the workers in question regularly work longer hours than are permitted for their colleagues in general; but whereas in the first case special normal hours are directly fixed for these workers, in the second the special limit is reached by adding to the general limit. The groups of workers covered by these different sorts of special provision consist principally of those engaged in the preparation and termination of work and intermittent work. There are also other operations which, though not recurring in the same regular way, by their nature require more or less long and frequent extensions of normal hours: the co-ordination of the work of successive shifts, seasonal operations and loading, unloading and transport are instances.

Next, at any time in the day-to-day work of a mine an exceptional situation may occur—due to accidents, mechanical break-

downs, the absence of a worker, etc.—which disturbs or threatens to disturb the normal organisation of work; and to deal with such a situation, which is usually unforeseen, there is in most cases nothing for it but to extend the hours of the workers in question beyond the normal.

Lastly, there are cases in which, for various reasons, hours of work must be extended in order to increase production.

Work in excess of normal hours may thus be necessitated in a number of different circumstances, due in their turn to many and various causes. In order to facilitate analysis, these circumstances may be classified into: a first group in which the reasons derive from the nature of the operation or occupation; a second in which accidental causes are responsible; and a third in which economic considerations or public interest require an increase in output.

It should be noted further that several regulations either authorise special extensions without exactly stating the reasons, or recognise them implicitly by attaching certain conditions to their use.

§ 1. — Extensions due to the Nature of the Work

These extensions are directly related to the technique of certain operations, the normal performance of which involves conditions incompatible with the hours standards laid down as a general rule for work in mines. Many such extensions must be allowed daily or at known intervals; and some regulations, rather than establish regular exceptions to the general limits, have provided for longer normal hours than those applying to other workers; in many countries this is particularly the practice as regards continuous operations, the organisation of which was discussed in the preceding chapter. Nevertheless most regulations meet the special requirements due to technical conditions, or to the nature of the operation or occupation, by providing for the extension of normal hours of work.

The operations and occupations requiring extension are as follows: preparation and termination of work; co-ordination of the work of two successive shifts; intermittent work; loading, unloading, and transport; work subject to seasonal influences; and sundry others.

The length of extensions will be the subject of a special section; but the additional hours authorised will also be briefly indicated here, whenever they are prescribed in the regulations.

1. PREPARATION AND TERMINATION OF WORK

These are operations which must necessarily be done either before the beginning or after the end of the ordinary work of the undertaking or the shift, so that full production may start at the time fixed or that there may be no disturbance in productive work.

However, the authorised additional hours may not be utilised for productive operations proper; the regulations in force in the *Canadian* Province of Saskatchewan and in *France* have a specific provision to this effect.

Some of the operations in question must be done immediately before the ordinary work begins, others immediately after; others again may be done at any moment between spells of ordinary work.

Heating boilers and raising steam must be done immediately before general work starts, and drawing fires and exhausting steam immediately after it ends. In the same way, the store-keeper must arrive a few minutes before the workers of his shift, so that he may be ready to issue the necessary tools; and he will not be able to leave until they have returned their tools to him. On the other hand, the cleaning of premises and the cleaning and general oiling of machinery may take place either after work ends or before it starts.

Most of the national regulations provide for such exceptions from the general rules. The following are instances.

Austria: operations which must be done before or after the ordinary working day (2 hours a day); *Belgium*: preparatory or complementary work which must of necessity be done outside the time allotted to the general work of the undertaking (2 hours a day); *Canada* (Saskatchewan): work necessary in preparing for or terminating the work of the mine, provided this additional working period is not devoted to the production or transport of coal ($\frac{1}{2}$ hour a day); *France*: for underground workers, technical work which is necessary for preparing or terminating work in the ordinary way or for a full resumption of work on the next shift, provided that it does not refer to the production or transport of coal ($\frac{1}{2}$ hour a day, $2\frac{1}{2}$ hours a week); *Germany*: supervision of plant and cleaning and maintenance work on which the normal operation of the undertaking or of another undertaking depends; work technically necessary to enable production to be resumed or to be kept at full pressure (2 hours a day); *Italy*: preparatory and complementary work which must be done outside the normal

hours of the undertaking to ensure that work shall start, resume or cease at the usual time or to avoid disturbances to production or danger for the workers; *Poland*: work which can only be done immediately before the beginning or immediately after the end of the general work of the undertaking or of the shift (1 hour a day; 2 hours in exceptional cases); *Turkey*: preparatory and complementary work and cleaning work which must be done before or after the hours fixed for the general work of the undertaking.

In several regulations the general rule is illustrated by examples. The *Rumanian* legislation provides that the following operations are covered: heating boilers, cleaning workshops, preparing machinery, etc. Similar examples are given in *Yugoslavia* (2 hours a day); and in *Czechoslovakia*, where mention is also made of care of animals.

Other schemes go into greater detail and enumerate the operations or groups of workers covered.

Work of preparation and termination relating to *steam engines* is the subject of special provision as follows: in the *Australian States* of Western Australia and Victoria and in *New Zealand*: raising steam, drawing fires, exhausting steam; in *France*: work of surface workers specially engaged at ovens, steam engines and fires belonging to the latter, provided the object is only to terminate operations, before or after fires are drawn (1 hour a day); in *Great Britain*: firemen employed underground (maximum of 8½ hours underground); and *Spain*: starting and stopping engines.

Maintenance and cleaning work is specially dealt with in *France*, where the regulations relate to the work of surface workers employed regularly or exceptionally during stoppage of production on the maintenance and cleaning of machinery and appliances which owing to the interconnection of operations cannot be stopped separately during the general work of the mine, provided that such work cannot be done during normal hours (1 hour a day).

The work of lowering and raising workers or transporting them inside the mine may give rise to extensions in *France*: enginemmen and men in charge of internal shafts who are engaged upon the transport of workers as well as for drivers of locomotives and other staff of trains used for the transport of workers (actual time at the workplace may exceed 8 hours a day by the time strictly necessary to complete the transport of workers in transit). In *Belgium*, also, these groups of workers have longer hours in practice. In *Great*

Britain the exceptions already mentioned in respect of winding enginemen may be considered as applying also to the transport of workers; further, if it is necessary to send a party down the mine when no shift is at work there, and a person who does not as a rule work a winding engine is therefore required to do so, such person may be employed for up to 12 hours in the day. In the *Netherlands* the hours of winding enginemen may be extended in order to comprise the lowering or raising of the workers of a shift (1 hour a day). In the *United States* employees whose daily work includes the transplantation of workers or who are required to remain on duty while men are entering or leaving the mine may be exempted from the maximum hours provision.

Normal hours may be exceeded for *safety work*, particularly in *France*, in mines subject to instantaneous escapes of gas, for workers required to make the prescribed inspection after shotfiring or before resumption of work (3 hours a day, with a maximum of 9 hours a week), and in *Australia* and *Great Britain* for safety men, pump minders, fanmen, shotfirers (8½ hours underground per shift in Great Britain).

Some regulations mention specific groups of workers. Persons responsible for the care of *animals* are an instance (*Australia, Austria, Czechoslovakia, France, Poland, United States*): in *Czechoslovakia*, the care of animals is considered as additional work; in *France*, for grooms employed underground, actual time at the workplace may not exceed 8 hours a day and 42 hours a week; in *Poland*, a general provision permits extensions for persons employed in road transport who are responsible for the care of draught animals (3 hours a day), and also for persons responsible for the maintenance of motor vehicles (2 hours a day); and in the *United States* the Anthracite Agreement provides that drivers shall take their mules to and from the stable, the time required for this not being counted in the day's labour.

Further, in *France*, *underground storemen*, as also *winchmen and locomotive drivers* and their indispensable assistants, may be at the workplace for 8 hours a day and 42 hours a week; in *Belgium* most of these groups also have longer hours. In *Great Britain* winding enginemen may work 10½ hours a day at shafts where only one shift of workers descends and ascends during the day and no coal is wound before their descent and after their ascent. In *Spain* (standards of employment for the mines of Oviedo and León), haulage men may do not more than 4 consecutive additional hours, with a maximum of 30 in the month.

As regards *supervisory staff*, work in excess of 40 hours a week is allowed in *France* if required for drafting reports or for dealings with the workers or the mine management (4 hours a week).

2. CO-ORDINATION OF WORK OF TWO SUCCESSIVE SHIFTS

Co-ordination of this sort, whether the work in question is necessarily continuous or is not necessarily so but is done in successive shifts, may involve additional hours for one or more members of the shift going off duty. As a rule a foreman or official must remain on the spot to pass on instructions to the relieving shift. In *Czechoslovakia* hours may be extended so that work can be taken over when the shift is relieved; in *France* a similar provision applies to shift foremen and specialised workers whose presence is required for co-ordinating the work of two successive shifts or for preparing a shift's work ($\frac{1}{2}$ hour over and above the general limit for the shift); and in *Germany* to foremen and other persons in charge of operations or groups of workers when their presence is required for preparing or terminating work or linking up the work of two successive shifts (1 hour a day).

Mention may also be made, for information, of certain continuous operations underground where each shift must be relieved at the actual workplace; this necessitates making allowance, in the form of additional hours, for the time lost on the way from the shaft to the workplace and back. (Cf. p. 62 and pp. 157 *et seq.*).

Extensions to permit the periodical change-over of shifts (for which, moreover, compensatory time off is automatically allowed) have been discussed in the section dealing with the organisation of continuous work.

3. INTERMITTENT WORK

The essential characteristic of intermittent work or operations is that they involve more or less long and frequent periods of inaction, during which the persons engaged in them have to display neither physical activity nor sustained attention, or remain at their posts only to reply to possible calls. Caretaking, the work of watchmen in charge of workplaces, premises or plant, checking, minding machines which only work intermittently (such as some fans and pumps), signalling, etc., fall into this category.

Here again the regulations provide for extensions by the use of a general formula: in *Canada* (British Columbia), reference is made to groups of persons whose work is essentially intermittent; and in *Germany*, to the supervision of certain work (1 or 2 hours a day).

The general formula may be followed by examples. In *Chile*: extensions apply to intermittent work requiring mere attendance (12 hours of presence a day). The *Rumanian* regulations refer to occupations in which work is essentially intermittent (the work of watchmen, drivers, etc.); and those of *Turkey* to persons whose duties are essentially discontinuous and require intermittent work only (watchmen, night watchmen, persons engaged in testing, checking, etc.).

In *France* (surface workers) the extensions permitted on this ground apply in particular to the following: persons engaged exclusively in watchkeeping and supervision whose work is interrupted by long genuine rests (4 hours a day, provided not more than 56 hours are worked in the week); weighbridge-men in charge of the weighing of trucks and lorries ($\frac{1}{2}$ hour a day), time-keepers, messengers, etc. (1 hour a day). In *Poland* the hours of watchkeeping and similar staff employed at the surface vary from 9 to 12 a day, according to the work.

In *Czechoslovakia* there is no limitation of hours for persons to whom this exception applies, but a minimum daily rest is fixed (12 hours' a day).

Some regulations specify exactly the persons covered: on-setters in *Australia* and *Spain* (provinces of Oviedo and León: 4 consecutive hours, with a maximum of 30 hours a month); pumpmen in *Australia*, *Great Britain* ($8\frac{1}{2}$ hours' presence in the mine per shift) and *Spain* (4 consecutive hours, with a maximum of 30 hours a month); fanmen in *Australia* and *Great Britain* ($8\frac{1}{2}$ hours' presence in the mine per shift in the latter country); and winding enginemen in *Germany* (9 hours of service if hours of attendance predominate over hours of actual work) and in *Great Britain* (up to 10 hours of presence per day at times of the day when work is light, a shift of under 8 hours having been worked during that part of the day when work was heavier).

4. LOADING, UNLOADING, AND TRANSPORT

Extension of hours for loading, unloading and transport work is permitted in *Austria*, *Belgium*, *France*, *Germany*, *Poland*, and the *United States*.

In *Austria* the extension applies to drivers of horse and motor vehicles, grooms, messengers and staffs of mine railways (16 hours per fortnight). In *Belgium* a Royal Order applying to all industrial undertakings provides that normal limits to hours of work may be exceeded for the transport, loading and unloading of goods, for handling trucks, weighing trucks and other vehicles in so far as this constitutes part of the activity of an industrial undertaking (2 hours a day and 100 hours a year). In *France* extension is permitted for drivers of motor vehicles, deliverymen and storekeepers (1 hour in excess of the normal daily limit) and for drivers of horse-drawn vehicles (1 ½ hours); an extension of a further 1 ½ hours is permitted when the meal break is counted in the working day. In *Germany* there is a general provision of this nature in the hours of work legislation (2 hours a day). In *Poland*, also under a provision of a general order, persons engaged in road transport who are directly responsible for the maintenance of vehicles or minding of draught animals may be employed in excess of normal hours (2 and 3 hours a day respectively). In the *United States* it is provided that mine workers engaged in the transportation of men and coal shall work the additional time necessary to handle man-trips and coal in transit, and that outside employees engaged in the dumping, and handling of coal—and, in anthracite mines, the emptying of the breaker—may work additional time (half an hour a day).

5. WORK SUBJECT TO SEASONAL CONDITIONS

Extensions in view of seasonal conditions are permitted as follows: in *Austria*, in mines the operation of which depends on the season or temperature (2 hours a day and 180 hours a year); in *Italy*, in mines and quarries of all sorts over 1,000 metres above sea level (a working day of 10 hours for not more than six months in the year); and in *Spain*, in mines where by reason of the altitude or the topographical or climatic conditions it is impossible to work for more than six months in the year (1 hour a day and 6 hours a week).

In *Canada*, according to information supplied by the Provincial Governments of Alberta and Saskatchewan in 1936, the production of coal is powerfully affected by seasonal factors, and hours of work therefore fluctuate widely during the year. In the *United States* men working about the tipples may do overtime during the winter months in order to empty all cars and so prevent the coal from freezing in the cars (half an hour a day).

6. OTHER WORK

A number of other cases of extension are permitted, under various schemes, for widely different reasons.

Additional time may be worked for *sorting coal* in *Japan* and the *United States*. In *Japan* the hours of women employed in sorting may be extended (up to 12 hours a day) on fulfilment of the three following conditions: if it is impossible to establish a two-shift system with less than 11 hours per shift; if the work is frequently interrupted and does not cause undue fatigue even when continuing for 12 hours a day; and if the three-shift system would probably bring about only a small rise in output and, on the other hand, would unduly increase the undertaking's costs. In the *United States* employees engaged in the preparation of coal must work the additional time necessary to deal with the coal delivered in each shift (maximum of 30 minutes); and in the anthracite mines the same applies to employees engaged on the re-preparation of condemned coal.

Extensions are permitted when required for certain *technical reasons* in *France*, *Germany*, *Italy*, and the *U.S.S.R.*

In *France*, for surface workers, this provision applies to operations which on technical grounds cannot be stopped at will, when for reasons deriving from their nature or from exceptional circumstances they have not been finished at the normal time (2 hours a day). There is a similar extension for work essential to the safety of the mine which must be done under the orders of the same person throughout, i.e. changing cables, props, guides, etc. (supervisory staff; no maximum hours, but one day only). Further, the Decree of 21 December 1937 provides that until 30 September 1938, in mines and pits which are worked on all weekdays by means of a system of rotation of staff, the weekly hours of supervisory staff may be spread over six days and increased by not more than 8 hours, provided the total additional hours worked during the period in question do not exceed 180. On the same grounds, and again until 30 September 1938, workers with special duties (mechanics, shotfirers, locomotive drivers, firedamp inspectors) whose presence is indispensable to the proper operation of the mine and who cannot be immediately replaced owing to the need for training, may be called upon, with the authorisation of the principal mines inspector, to work an extra shift a week up to a maximum of 20 shifts.

In *Germany* extension is authorised in respect of work technically necessary in order that production may be resumed or kept at full pressure (2 hours a day).

In the *U.S.S.R.* extension of hours is permitted if its object is to finish an operation which for technical reasons could not be completed during normal hours, provided its termination is absolutely necessary and its interruption would involve damage to material or goods (length of the extension included in the aggregate annual quota of 120 hours' overtime; maximum of 4 hours in any two-day period.)

The *introduction and testing of new machines* may also necessitate extension. In *Great Britain* the report of a special enquiry into the working of overtime in Lancashire coal mines stated that the growth of machine mining had increased the incidence of "emergencies" and "unforeseen circumstances" of the kind contemplated by the Act, particularly during the period immediately following the introduction of machinery.

Work on certain types of coal is regarded as justifying an extension in Austria and in Great Britain. In *Austria* normal hours may be exceeded in places where for reasons of safety it is impossible to relieve the workers engaged at the face; and in *Great Britain* a similar exemption relates to stall-men when engaged in the process of taking down top coal in square or wide work in the thick coal of the South Staffordshire district, so long as their presence in or near the stall is necessary to ensure safety.

Lastly, hours in excess of the normal limit are permitted in *Austria* for all persons employed in the mines whose hours of service cannot be exactly determined in advance (16 hours a fortnight) and in *Chile* for persons performing duties which by reason of their character cannot be subjected to fixed limits, and also for persons holding positions of supervision, direction, or trust such as managers, overseers, door-keepers, etc. (12 hours of attendance per day).

§ 2. — Extensions due to Accidental Causes

These extensions apply when, owing to exceptional causes which cannot be foreseen and therefore lie outside the control of the management, safety, repair or conservation work becomes necessary in order to prevent accidents. Moreover, such work must be done at once, for its postponement may involve danger to human life or

to buildings, plant or machinery, or to the mine itself. Extension may also be necessary for rescue and salvage work or in order to make good the results of accidents which have occurred—explosions of firedamp or coal dust, fires, falls of rock, floods, escapes of poisonous gases, breakages of machinery, broken cables, damaged plant or rails etc.

All the regulations permit extensions in such circumstances, indeed their necessity is indisputable. In most cases a general formula is used—accident or threat of accident; catastrophe; serious danger; danger or threat of danger; emergency involving serious risk to the safety of human life, the mine or property; rescue work; damage to the machinery, equipment or plant of the mine; etc.

Some regulations speak of work required to keep the mine working, or to ensure that no interruption occurs, or to avoid a serious disturbance in operation (*Austria, Canada—Alberta and British Columbia—Great Britain, Netherlands, Rumania, etc.*).

Some are more precise. The *Australian* regulations specify “fires, inrush of water, falls and other emergencies”; and in New South Wales mechanics engaged on repairs to fan-winding engines, main haulage engines, haulage ropes connected to these, main inclined ropes and main steam pipes may be required to work additional hours. In the *Netherlands* there is a special exception relating to persons repairing shafts (2 hours a day, not more than three times in 7 consecutive days).

Vague terms are sometimes used, such as emergency, urgent need, exceptional circumstances or *force majeure*, which enable all sorts of unforeseen situations to be faced. On the other hand, some regulations, e.g. in the *Netherlands*, state that additional hours shall be permitted when the situation cannot be met by any means other than an extension.

Apart from accidents proper, reference may be made here to provisions for additional work in unforeseen or exceptional circumstances. In *Great Britain*, for instance, a workman is not guilty of an offence in case of failure to return to the surface within the prescribed time if he is prevented from doing so owing to means not being available for the purpose.

Where work is organised in shifts, the unexpected *absence of a member of the relieving shift* may compel a worker who would otherwise go off duty to continue at work until his substitute arrives. Provision is made for this in *France* (Decree relating to surface workers) and in *Spain*, (standards of employment for

the Puertollano mines); but in the former case the extension applies only to foremen and specialised workers whose presence is indispensable to the work of a shop or shift. In *Great Britain* the Winding Enginemen Regulations provide that where winding is done by a succession of shifts and one of the enginemen is absent by reason of illness, accident or other cause, the other engineman may be employed for not more than 12 hours a day, or on a system of 8-hour shifts with an interval of 8 hours between each shift, but not for more than 6 weeks consecutively.

In the *Netherlands* the hours of work of underground workers may be extended by reason of the special conditions of operation of the mine (2 hours a day not more than twice in any period of 7 working days, or one 8-hour shift in the same period). The collective agreement for surface workers permits an extension to prevent disturbance in the normal operation of the mine or to make good such disturbance (18 hours per month).

§ 3. — Extensions for Economic Reasons and in the Public Interest

In certain circumstances the demand for coal may rapidly increase and exceed the quantity habitually raised. Stocks in hand enable these new needs to be met up to a certain point: but in order either to bring stocks more rapidly back to their normal level or to constitute a supplementary supply, it may be necessary to increase production by lengthening the shift or—apparently the more frequent practice—by working additional shifts.

The reasons given are of various sorts. Several schemes, either general hours of work legislation or special regulations for mines, refer to *exceptional pressure of work* or to *economic needs*. The *Belgian Hours of Work Act*, for instance, mentions exceptionally heavy orders due to unforeseen events (2 hours a day for three months in the year); whereas the Royal Order introducing the 45-hour week in coal mines alludes to the position regarding stocks of coal (extension to be specified by Royal Order). In *Czechoslovakia* the Act permits extensions when the public interest or other major consideration requires an increase in output (2 hours a day for twenty weeks in the year, i.e. 240 hours a year); and the collective agreement for the Moravská-Ostrava coalfield authorises overtime in case of shortage of coal. In *France*, for underground workers, extensions may be authorised when economic conditions

so require (62 hours, i.e. eight shifts of $7\frac{3}{4}$ hours, a year), and as an exceptional measure this limit may be raised (to 93 hours, or twelve $7\frac{3}{4}$ -hour shifts) to face a national emergency or to meet a large deficit in the French output of coal: for surface workers, additional hours are permitted in case of exceptional pressure (to the extent authorised for underground workers, with a maximum of 96 hours a year). Extension in case of exceptional pressure is permitted for all workers in *Rumania* (1 hour a day for three months in the year) and *Yugoslavia* (2 hours a day for four weeks, renewable three times). Similar reasons apply in a number of other countries. In *China* the relevant Act provides that normal hours may be exceeded by reason of variations in local conditions (up to a total working day of 10 hours). In *Germany* normal hours of work may be exceeded for general reasons of an economic nature (extension to be determined by the competent authorities). In *Poland* the same applies in case of special needs, of which due evidence must be given (4 hours a day and 120 hours a year). In *Turkey* hours may be extended when the economic interest of the country so requires, and in order to raise output above the normal level (3 hours a day for ninety days in the year). Lastly, the Anthracite Agreement in the *United States* provides that the number of working days in any given week may be increased for the purpose of meeting extreme emergencies in which the market demand may require operation in excess.

The reasons of national interest specified by a number of regulations resemble those mentioned in the preceding paragraphs. Extension is permitted in *Czechoslovakia*, with a view to increasing output when the public interest so requires (see p. 86); in *France*, for surface workers, in respect of urgent work for the interests of national safety or defence or for a public service (limit to be fixed jointly by the Minister of Labour and the Minister requiring the work to be done), and for underground workers, in the event of a national emergency (see pp. 86-87); in *Germany*, in case of urgent public need, particularly with a view to reducing unemployment or ensuring the food supply of the population (extensions to be determined by the supreme national authority); in *Turkey*, in case of mobilisation or preparation for mobilisation (limit to be fixed by the Council of Ministers and to correspond to the maximum capacity of the workers); and in the *U.S.S.R.*, for work indispensable to the defence of the State or to prevent public calamities and dangers (extension included in the aggregate quota of 120 hours a year; not more than 4 hours in any two-day period).

As will be seen below, these reasons relating to the economic life or general interest of the nation, which give rise to longer hours in the countries just mentioned, lead elsewhere to a more radical measure, namely suspension of the regulations. This will be dealt with in a later section.

Lastly, mention should be made of the special case of extension relating to the *amount of skilled labour available*. In *France* the Decree of 21 December 1937, which authorises extensions for certain specialised workers (see p. 88), alludes to the impossibility of recruiting such workers immediately, owing to the training required. In *Italy* the Legislative Decree of 29 May 1937 which introduced the 40-hour week in industry provides that normal hours may be exceeded when the number of persons with the necessary qualifications is insufficient to meet the needs of production.

§ 4. — Extensions without Specified Reason

Certain regulations permit extensions without indicating the reason. Some place a quota of overtime at the free disposal of employers. In *Germany*, for instance, the workers of an undertaking or part of an undertaking may be required to do not more than 2 hours a day for thirty days in the year, at the employer's choice, above the normal daily limit. In the *United States* the Anthracite Agreement provides that employees may, at the employer's discretion, work six days in the week, instead of five, for twelve weeks in the contract year.

It may be pointed out that in *Great Britain* a provision of this sort is used to fix the length of the shift at 7½ hours (both winding times excluded). The Coal Mines Act of 1908, as amended in 1919, provided for a 7-hour day, but stipulated also that the shift might be increased by 1 hour a day for sixty days in the year at the employer's choice. In 1926 this extension was authorised throughout the year—a provision equivalent to introducing an 8-hour shift. In 1931 the length of the extension was reduced to half-an-hour, so that now the length of the shift is 7½ hours.

In some cases the extensions depend on previous agreement between the parties concerned. Such a requirement is laid down in the *Chilean* and *Yugoslav* Acts, which permit 2 hours' overtime a day on that condition.

In *Germany* collective rules may provide, on a permanent basis, for work in excess of the normal hours. Such provisions actually

apply to certain groups of surface workers, whose hours are fixed in excess of 8 per day, subject to an increase of 10 or 15 per cent. on normal rates of pay.

In some countries additional hours or extra shifts are in practice permitted, as is clear from the fact that collective agreements or arbitration awards fix special higher rates of pay for overtime. This is the case, for instance, in *Great Britain* and *New Zealand*.

B. — PROCEDURE FOR AUTHORISATION OF EXTENSIONS

The procedure to be followed in order that advantage may be taken of the different extensions is not always the same.

Some of the extensions are meant to meet needs which cannot be foreseen. It must therefore be possible to take immediate advantage of them, and the most that can be asked of employers is that they should notify their recourse to such extensions. Others, based on the nature of the work or on economic circumstances which do not arise suddenly, may be made dependent on permits issued in advance, themselves subject to certain formalities—decision of the competent authority, agreement between the parties concerned, etc. Lastly, in some cases extensions are directly conditional on agreement between the parties.

§ 1. — Extensions permitted automatically

Most of the extensions permitted automatically relate to the nature of the work or to accidental causes. Extra hours for reasons of both these sorts are regarded as necessary, the manner in which they may be worked is laid down once and for all in the regulations, and employers may take advantage of them—in the prescribed manner and within the prescribed limits—without further formality.

As regards extensions based on the nature of the operation or occupation, it may nevertheless be pointed out that in some cases the relevant Act leaves the determination of the operations and occupations in question and the details regarding application to administrative decrees, orders, etc., or to collective agreements. In *Czechoslovakia* preparatory and complementary work giving rise to extension must be determined—for each branch of industry or group of undertakings—by the Minister of Social Welfare, who must

first of all consult the competent chambers. In *Italy* such work is determined by collective agreement, or, failing this, by the corporative inspectorate. In *Rumania* extensions of this nature are fixed once and for all by the labour inspection service, in accordance with the schedules issued by the competent Minister.

In case of accidental causes, too, particularly when a real emergency has arisen, extensions are permitted automatically and may be put into operation as soon as circumstances so require. Some regulations, however, provide for supervision after the event, in order to prevent abuse; the employer is required to inform the competent authority (labour inspection service, mines inspectorate, etc.) immediately after the extension begins or within a very short period. This is the case in *Great Britain* (accident to winding machinery, or other accident interfering with the lowering or raising of workmen), *India*, *Italy* (including cases in which it is impossible to meet a sudden pressure of work by engaging additional staff), *Japan*, *Poland*, *Rumania*, *Spain*, *Turkey*, *U.S.S.R.*, and *Yugoslavia*.

The period within which the extension must be notified to the competent authority is 48 hours in *Italy* and three days in *Rumania*. In the other countries it must be notified immediately after the extension of hours begins or within 24 hours. Further, in *Italy*, the notification must indicate the reason for extension, the type and probable duration of the work in question, the number of daily hours' overtime, and the groups of workers concerned.

Finally, a number of regulations provide that employers shall enter in a register certain of the extensions of which they have availed themselves (see pp. 104-106).

§ 2. — Extensions subject to Permit, Administrative Regulation, or Agreement

Recourse to extensions for the purpose of meeting economic or national requirements is not as a rule allowed without a *permit* from the competent authority, which is sometimes required, before deciding, to consult the occupational organisations concerned. In *Belgium* such a permit is issued by the Minister of Labour, on the basis of a report from the labour inspector and in conformity with an agreement between the employer and the organisation or organisations to which the majority of the workers belong (or, failing such organisation, the majority of workers themselves).

In *China*, *Rumania*, and *Turkey* the permit is issued by the competent authority; in *Czechoslovakia*, by the mines administration (subordinate authority for the first quota of additional hours, higher authority for the second); in *France* (surface workers) by the mines inspector; in *Italy*, by the Minister of Corporations, who must consult the appropriate trade associations except in case of urgent or special need; and in *Poland*, by the labour inspector.

The application for a permit must as a rule describe the circumstances and give reasons. In *France*, for instance, it must state the nature of and reason for the desired extension, the number of workers whose hours are to be extended, the days on which the additional hours are to be worked, and the hours and rest periods proposed for the workers concerned; it must also give evidence that the exceptional pressure of work cannot be met by other means, such as the engagement of additional staff.

Permits are also required in *Austria* and *Spain* for extensions on account of seasonal conditions. Such permits are issued by the competent Minister, who must consult the appropriate organisations in advance (the miners' unions in *Austria* and the competent joint boards and the Permanent Office of the Labour Council in *Spain*).

In some instances extensions apply only after the issue of *administrative regulations*; this is the case in *Belgium*, *France* and *Poland*.

In *Belgium* any exceptions to the Royal Order introducing the 45-hour week in coal mines must take the form of Royal Orders in Council, issued after consultation of the Committee which is required to study the situation of coal stocks. In *France* hours of work underground may be extended, when economic conditions so require, by Orders of the Ministers of Public Works and Labour. In *Poland*, when such a course is required by political or economic reasons, the Council of Ministers may authorise the extension (or order the reduction) of daily or weekly hours; this it does by means of Orders, proposed by the Minister of Social Welfare, who must first consult the chambers of industry and commerce and the trade organisations of employers and workers concerned.

Further, in *France* (surface workers) extra hours may be *ordered* by the Government, when work is required for national safety or defence, or for a public service.

Extensions of a general nature are only permitted on the basis of *agreement between the parties concerned* in *Chile*, the *United States*, and *Yugoslavia*.

In the anthracite mines of the *United States* an increase in the number of working days may be decided by a board consisting of representatives of the employers and workers, which must take account of the situation of the industry. Further, some agreements provide that in case of accident, actual or threatened, the management must discuss with the pit committee whether work exceeding the limit is necessary, and that the permission of the committee shall be required when work is to be extended.

In *Turkey* extensions for economic reasons depend on the *consent of the workers*.

In *Hungary* additional hours are only worked in exceptional circumstances and by *workers who have volunteered* to do so.

C. — LENGTH OF EXTENSIONS

Like the procedure for making use of extensions, the length of an extension is closely related to the reason for which the normal hours are exceeded.

Extensions based on the nature of the work may be limited in advance, for in the majority of cases experience enables the necessary amount of additional time to be known fairly accurately. As a rule the figure laid down is a maximum, within which recourse may be had to extension for as long as is required; but sometimes the only limitation is the provision that work may continue for the time required to complete the operation for which the extension was granted.

Where the cause is of an accidental sort, on the other hand, there is a powerful unknown factor, and the length of the extension cannot be determined in advance. Nevertheless, if the overtime continues for more than a certain period, the employer may be required to take steps to ensure that the workers in question do not work unduly long hours. Thus in *France*, in case of accidents, the extension is unlimited for the first day and subsequently restricted (2 hours); but underground the extension remains unlimited if there is rescue work to be done.

Nevertheless, these extensions are as a rule confined to the time required to prevent accidents or make good their results, and cease—or at least should do so—as soon as work in normal conditions can be resumed. There are express provisions on this point in the regulations of *Czechoslovakia*, *France*, *India*, *Italy*, *Spain* and *Turkey*.

Extensions for economic reasons or in the public or national interest are as a rule strictly limited, since their abuse might lead to the substitution for the normal scheme of one comprising longer working hours. Such a practice would not only constitute a veritable step backward with regard to conditions of work, but might also have a bad effect on employment. Moreover, as has been seen, these extensions are usually subject to special procedure, which enables the competent authority not only to take account of the reasons given but—still more important—to prescribe the conditions in which the extension may be used, in particular, its length.

Extensions based on agreement between the parties concerned hold good for the period stipulated in such agreement.

Methods of Limitation; Limits fixed

Some extensions are confined to the time which is strictly necessary. For others the regulations themselves fix the length, or at least lay down a maximum.

The limits have already been given in the section relating to reasons for extensions; and it will have been noticed that there are several methods of limitation. One is to rule that a certain number of hours may be worked in excess of the normal, the number being fixed by the day, week, fortnight, month or year; a second, to provide that hours of work, including the extension, may not exceed a certain maximum limit. In some cases, yet another limit is introduced by fixing the period during which extension is authorised.

In the case of extensions which are based on the nature of the work and recur with more or less pronounced regularity, a limit is most often fixed for the *day*. This applies in *Austria*, *Belgium* and *Yugoslavia* for work of preparation and termination, 2 hours; in the *Canadian* Province of Saskatchewan for work of preparation and termination: $\frac{1}{2}$ hour; in *France* for surface work: $\frac{1}{2}$ -4 hours according to the reason for the extension; in the *Netherlands*, for winding engine-men: 1 hour; and in *Poland* for work of preparation and termination: 1 hour, or 2 hours in exceptional cases, and for persons responsible for the maintenance of motor or horse vehicles: 2 and 3 hours respectively.

Limitation by the *day and week* is provided, in similar circumstances, as follows: in *France* for work of preparation and termination underground; $\frac{1}{2}$ hour a day and $2\frac{1}{2}$ hours a week; and for workers responsible for safety inspections in mines subject to

instantaneous escapes of gas: 3 hours a day and 9 hours a week; and in *Spain*, in mines where it is impossible to work for more than six months in the year: 1 hour a day and 6 hours a week.

The limitation is by the *fortnight* in *Austria* for drivers of horse and motor vehicles, grooms, messengers, staffs of mine railways, persons required to distribute consumers' goods, and any other persons whose hours of duty cannot be exactly limited: 16 hours; by the *day and month* in the *Spanish* Province of Oviedo and León for onsetters, trammers, fan-minders: 4 consecutive hours a day, 30 hours a month; by the *week and month* in *Germany* for commercial staff in the Rhenish-Westphalian bituminous coalfield: 6 hours a week averaged over the month; and by the *day and year* in *Austria*, in mines in which operation is affected by the season and temperature: 2 hours a day and 180 hours a year.

Several regulations, instead of fixing the number of hours of overtime, provide for a *maximum working day or week*, including the extension. This is the case in *Chile* for persons in positions of supervision, management or trust and those engaged in intermittent work: 12 hours a day; in *France* for underground grooms, underground storemen, winchmen, and locomotive drivers and their indispensable assistants: 8 hours a day and 42 hours a week, and for surface workers employed exclusively at watch-keeping and caretaking: 56 hours a week; in *Great Britain* for winding enginemen: 10½ or 12 hours as the case may be; in *Japan* for women employed in sorting: 12 hours a day; in *Italy*, in mines over 1,000 metres above sea level: 10 hours a day for six months in the year; and in *Poland* for certain kinds of supervision: 12 hours a day.

In *Czechoslovakia* the daily hours of presence of persons employed at irregular work which is not exhausting, such as watch-keeping and caretaking in buildings and works, are indirectly limited to 12 hours a day by the provision that there must be a minimum rest of 12 hours in every 24.

For extensions for reasons of an economic nature or in the public or national interest, and those based simply on agreement between the parties, there is generally a daily or weekly maximum limit with a second limit applying to the month or year. Sometimes the annual number of hours' overtime is limited by fixing the period during which the daily or weekly extension is permitted.

In *Chile* only a *daily* limit is laid down: 2 hours. There are *daily and weekly* limits in *Italy*: 2 hours a day and 12 hours a week, with 14 hours a week in urgent cases provided the weekly

average of 12 hours is not exceeded over a period of 9 weeks; and in the *Netherlands* for workers engaged in repairing shafts: 2 hours three times a week, and for other workers: 2 hours twice a week or one 8-hour shift a week. *Daily and monthly* limits are provided in *China*: 46 hours a month, with a maximum of 12 hours a day. There is a *monthly* limit for surface workers in the *Netherlands*: 18 hours. *Daily and yearly* limits are laid down in *Poland*: 4 hours a day and 120 hours a year and in the *U.S.S.R.*: a maximum of 4 hours in any two-day period, and 120 hours a year.

A *daily limit and a limit to the period* during which extension is authorised are provided in *Belgium*: 2 hours a day during three months of the year; in *Czechoslovakia*: 2 hours a day during four weeks in the year by permission of the subordinate mines authority, plus 2 hours a day during 16 weeks in the year by permission of the higher mines authority or 240 hours a year in all; in *Germany*: 2 hours a day for 30 days in the year; in *Rumania*: 9 hours a day in all for three months in the year; in *Turkey*: 3 hours a day for 90 days in the year; and in *Yugoslavia*: 2 hours a day for four weeks, renewable three times in the year.

Lastly, in *France* limitation by the *year* alone is provided for underground workers; 62 hours, or 8 shifts of $7\frac{3}{4}$ hours each, and, in case of national emergency, for all workers: (93 hours or 12 $7\frac{3}{4}$ -hour shifts for underground workers, and 96 hours or 12 8-hour shifts for surface workers.

In some cases the limits are fixed by the competent authority. In *France*, for surface workers, extensions relating to work to be done for purposes of public safety or defence, or for a public service, are limited in each case jointly by the Minister of Labour and the Minister who requires the work to be done. In *Turkey* the length of the extension provided for in case of mobilisation is fixed by the Council of Ministers.

Finally it should be noted that, for underground workers, overtime in order to increase output is done more often in the form of extra shifts than of extra hours added to the normal shift; this is for reasons connected with the organisation of work inside the mine. Thus in *France* the Orders issued during 1937 concerning the use of the overtime quota to make good a shortage of fuel due to a fall in output provide that the authorised extensions must take the form of extra days of work, on which the time spent in the mine may not exceed $7\frac{3}{4}$ hours; at the same time, employers or managers are authorised to require the surface staff to work extra shifts not exceeding 8 hours, corresponding to the extra shifts

worked underground. In the *Netherlands*, in exceptional circumstances relating to the operation of the mine, underground workers may be required to do one extra shift a week instead of 2 hours' overtime twice a week. In the anthracite industry of the *United States*, managements may employ workers for six days a week instead of five (i.e. one extra shift is worked) for 12 weeks in the year.

D. — REMUNERATION FOR ADDITIONAL HOURS

The rate of remuneration for hours in excess of the normal limit also depends on the reason for the extension.

Permanent extension for reasons relating to the nature of the work do not as a rule give rise to special payment, since the normal remuneration of the workers in question is itself determined with reference to the nature of the work and therefore also to the extension. In the *United States*, for instance, the general anthracite agreement provides that compensation for taking mules from the stables to the working place and back is included in the daily wage. Nevertheless, for certain of the operations in question, special increased rates are laid down in the following countries: *Australia* (with a few exceptions), *Austria*, *Belgium*, *Czechoslovakia*, *France* (underground work, and surface operations which for technical reasons cannot be stopped at will), *Germany*, *Yugoslavia*, and the *United States* (bituminous coal industry).

Extensions for accidental reasons outside the control of the parties do not always give rise to special rates of pay, the legislation in some cases considering that the workers as well as the employers have an interest in such extensions, since their object is either to save human life or to keep the mine in a fit state for operation. Neither party obtains a direct profit, and each is concerned to reduce the period of stoppage to a minimum, since it involves loss of earnings. Nevertheless, and particularly in regard to underground operations, the very conditions in which the work is done sometimes justify higher pay. Increased rates are therefore provided in *Australia*, *Austria*, *Belgium*, *China*, *Czechoslovakia*, *France* (underground workers), *Germany*, and the *United States* (bituminous coal industry).

On the other hand, extensions in order to increase output are of a clearly economic nature, and it is natural that the worker should be compensated by a higher rate of pay. This rate may be

considered also as a brake on the use of overtime by the employers, and thus as a method of preventing abuse. In fact most of the national regulations prescribe such increased rates for overtime when it is necessitated by a desire to increase production.

The methods of fixing overtime rates, and these rates themselves, vary from one scheme to another. As a rule, if there is an increased rate, it applies to the hours immediately following normal working time. But it may be pointed out that in Western *Australia* the first hour of overtime is paid at the normal rate; in *Italy* the increased rate applies, failing other agreement between the parties, only from the ninth daily and forty-ninth weekly hour onwards; and in *Spain* (Puertollano mines) the first hour of overtime done by a worker replacing another who is absent gives rise to compensatory time off, payment at the increased rate applying only to the subsequent hours.

The increased rates are usually determined directly by legislation; in this case a minimum is laid down. In a few countries, however, the statutory regulations leave the determination of overtime rates to the parties concerned; this is the case in *Czechoslovakia*, *Italy*, and *Spain*; and in *Italy* the national agreement for the mining industry in turn refers the matter to the provincial agreements. In still other countries, where there is no legislation on hours of work in coal mines or the legislation contains no provisions on the subject, the rates are left to collective agreements or arbitration awards; this is the practice, for instance, in *Australia*, *Great Britain*, the *Netherlands*, and the *United States*. Lastly, where minimum rates are stipulated in legislation, the collective agreements or arbitration awards frequently provide for higher rates; this is the case in *Austria*, *New Zealand*, and *Rumania*.

Under some schemes a flat rate of increase is provided. This is time and a quarter in *Austria*, *France*, *Germany*, *Hungary*, *Rumania* and *Turkey*, in all of which countries it is the legal minimum. In *Germany* collective rules, particularly that of the Rhenish-Westphalian coalfield, fixing daily hours of work at 9 hours or at 10 hours for certain surface workers according to the organisation or the nature of the work, provide for an increase in pay for the 9th and 10th hours of 15 per cent, which may, however, be reduced to 10 per cent. when the time is spent chiefly in attendance.

The overtime rate is time and a half in the bituminous coal industry of the *United States* (the anthracite agreement provides that overtime shall be paid at the normal rate) and in *Chile* and *Yugo-*

slavia. In *China* the rate is between a third and two-thirds above the normal.

Sometimes the rates of increase vary with the daily number of hours' overtime and according as such hours are done *by day or by night, on working days, Sundays or public holidays*.

In *Australia, Belgium, the Netherlands, and Poland* the first two hours of overtime are paid at time and a quarter, and any subsequent hours at time and a half; in the *Netherlands* the time-and-a-half rate applies throughout if an extra shift is worked. In the *U.S.S.R.* time and a half is paid for the first three hours above the normal, and double time for the remainder. In *Western Australia* the first hour of overtime is paid at the normal rate, the next four hours at time and a half, and the remainder at double time. In *Germany* commercial staff in the Rhenish-Westphalian bituminous coalfield receive a rate 15 per cent. above the normal for the first six hours of overtime in the week and 25 per cent. above the normal for any subsequent hours.

A distinction is made between overtime by day and by night in *Poland*: time and a quarter by day, time and a half by night; and under certain collective agreements in *Rumania*.

Overtime or extra shifts on Sundays give rise to a special increased rate in *Australia*: time and a half (but double time in *Western Australia*); in *Austria*: time and a half or double time according to the collective agreement; in *Belgium*: double time; in *Czechoslovakia*: time and a half or time and three-quarters according to the collective agreement; in *Hungary*: time and a half; in the *Netherlands*: double time; in *New Zealand*: double time; in *Poland*: time and a half; in *Rumania*: 40-50 or 100 per cent. above the normal according to the collective agreement; in the Puertollano mines of *Spain*: 50 per cent. increase, as against 35 per cent. on working days; and in the *U.S.S.R.*: double time.

In *Great Britain*, for time workers (datal men), a very large number of collective agreements stipulate time and a third for overtime during the week and time and a half at week-ends. Different rates are provided for in several districts; for instance: in *Northumberland* time and a quarter for underground datal men (no increase at the surface) during the week, and an hourly rate equal to one-sixth of the usual pay for a shift (both classes of workers) at the week-end; in *Durham* only week-end work is paid at increased rates (approximately the same as for week-end work in *Northumberland*); in *Scotland* time and a quarter is paid for week-end work; and in *Nottinghamshire and North Derbyshire*

certain classes of workers (winding enginemen, fan enginemen, power-house men, etc.), are paid for seven days' work if they have done six full shifts during the week, any part of which fell on Sunday. For British piece workers also, methods of payment for overtime vary from district to district. Some agreements provide, for instance, that hewers shall receive tonnage and a third or yardage and a third for overtime work; but in Scotland the general district agreement stipulates that there shall be no special rate for overtime.

Specially high rates are paid in a considerable number of countries for overtime done on public holidays. Fuller information on the subject of rates of pay on such holidays and on Sundays will be found in the preceding chapter, since it was not always possible to ascertain whether the hours worked on these days were regarded as ordinary time or overtime.

There remain a few exceptional regulations relating to overtime pay. In *Italy*, when aggregate hours (ordinary time and overtime together) do not exceed 8 in the day and 48 in the week, the employer is required to pay to a special unemployment fund a contribution equal to 10 per cent. of the wages due for the overtime worked, unless the collective agreement stipulates payment of a special higher rate for overtime. In *Japan* the regulations merely stipulate that overtime must be paid at a rate above the normal. In *Spain* supervisory staff in the mines of the provinces of Oviedo and León, and salaried employees of the mining undertakings in the latter province, receive a special bonus as compensation for the overtime they have worked during the year.

Lastly, *compensatory time off* may be given in *France* to all workers employed regularly or exceptionally during stoppages of production on the maintenance and cleaning of machinery and appliances which owing to the interconnection of operations cannot be stopped separately during the general work of the mine, provided that such duties cannot be done during normal hours.

E. — RESTRICTIONS ON RECOURSE TO EXTENSIONS

The regulations governing the hours of work in coal mines, and particularly those special to such mines, apply a system of considerable strictness to extensions. The practically universal obligation to give a precise reason for exemption, the procedure to be followed

for working additional hours, the limit to the length of the extension (and in some cases to the period during which it may be used), and the increased rates of pay for overtime—all these are conditions which in practice combine to keep work in excess of normal hours down to the minimum.

Some regulations, however, go further and place an additional limit on extensions, particularly those intended to increase output. The reason given is that in periods of depression overtime should be avoided as far as possible so as to facilitate the engagement of additional labour.

In *France*, for surface workers, a permit to work overtime in case of exceptional pressure of work is granted only if the employer shows that he cannot meet this pressure by any other means, such as the engagement of additional workers. Further, in case of exceptional and prolonged unemployment, an employers' or workers' organisation in the industry may apply to the Minister of Labour, who, having consulted the other organisations concerned, may then issue an order suspending the use of all or part of the quota of overtime normally provided for cases of exceptional pressure, such suspension to apply to the whole of France or to one or more specified regions.

In *Italy* overtime in case of exceptional pressure of work is authorised only in so far as the employer cannot have the work done by engaging additional staff.

In *Belgium* and *Czechoslovakia* the labour inspectors have received instructions to examine closely all applications for overtime permits which they receive, and only to issue such permits in exceptional cases where the necessary additional labour is not available. Indeed, it would appear that in *Belgium* no exemption on account of unusual pressure of work has been granted to colliery undertakings in recent years.

Another means by which the use of extensions can be restricted is to limit the number of persons to whom they may apply. In *France*, for instance, the number of persons engaged on necessarily continuous operations and preparatory and complementary work which must necessarily be done outside the hours laid down for the general work of the mine may not exceed 5 per cent. of the total working force (mines in normal operation); and only for reasons of safety peculiar to certain mines may a higher percentage be authorised by inter-ministerial Order.

F. — SUSPENSION OF THE REGULATIONS

It has already been stated that provision is made in the legislation of certain countries for the suspension of the operation of the regulations in cases where other countries allow normal hours of work to be extended. Such action is provided for in exceptional circumstances—grave economic emergency, or events endangering the national interest or safety.

For these reasons, and for others, the operation of the regulations may be suspended in *Belgium*, the *Canadian* Province of Saskatchewan, *Great Britain*, *India*, *Italy*, and *Rumania*.

In *Canada* (Saskatchewan) and in *Great Britain* operation of the relevant Act may be suspended “in the event of grave economic disturbance due to the demand for coal exceeding the available supply”.

In *Belgium* provision is made for suspension when it is necessary, in the national interest, to obtain by increased exports the means of exchange essential to the importation of subsistence goods. In *India* suspension of the regulations is left to the discretion of the Governor-General, but in case of public emergency local authorities have similar power. In *Italy* provision is made for suspension in case of an event involving danger to the national economy.

Suspension in case of war or other national danger is provided for in *Belgium*, *Great Britain*, and *Rumania*.

In *Great Britain* allusion is also made to “great emergency” and in the *Canadian* Province of Saskatchewan to grave economic disturbance.

Since suspension is a highly exceptional event, decision regarding it tends to be reserved to the supreme authorities, usually the Government itself or an authority directly dependent on it: in *Belgium* it involves the issue of a Royal Order; in *Great Britain*, that of an Order-in-Council; and in *Italy*, that of a Royal Decree submitted by the Minister of Corporations. In the *Canadian* Province of Saskatchewan the decision is taken by the competent Minister; in *Rumania* by the Council of Ministers after a report by the Minister of Labour; and in *India* by notification of the Governor-General; however, in case of public emergency, the local Government may authorise the suspension of the regulations by written decision.

CHAPTER V

SUPERVISION OF ENFORCEMENT OF REGULATIONS

In most countries the general hours of work regulations applying also to mines or the special regulations for mining undertakings provide for means by which the competent authorities and in certain cases the workers themselves may check the actual hours worked.

These regulations provide for supervision in various ways; for example, a time-table must be drawn up and posted, a record for each worker or shift must be kept in a register or by means of cards or slips, deputies must be entrusted with the work of supervision, etc.

Further, most regulations reinforce this check by prescribing penalties in case of infringement of provisions relating to hours of work.

A. — TIME-TABLES

§ 1. — Contents

The time-table which must be drawn up under several national regulations may either take the form of a simple hours schedule, or be included in some more comprehensive document such as the rules of employment of the undertaking.

In most cases the regulations merely provide that the time-table must indicate the length of the working day for the different classes of workers, the hours at which work is to begin and end, and the hours for rest periods. This is the practice in *China*, *Czechoslovakia*, *Germany*, and the *Netherlands*. In many cases, however, the provisions are fuller: in *France*, *Spain*, and the *U.S.S.R.* the time-table must indicate separately the beginning and end of each shift; and the *Belgian*, *British*, *French*, and *Japanese* regulations require that in case of collective winding the

time-table shall indicate the times at which the descent is to start and finish and at which the ascent is to start and finish.

The provisions governing hours of work in the coal mines of *France, Great Britain, India, and Japan* specify that a time-table must also be drawn up for surface workers, and indicate the form which it must take in this case.

In the *United States* the collective agreements impose no obligation on the employer to prepare a time-table, but in fact such tables are posted in most mines. In *Poland* the establishment of a time-table is not required by legislation, but only by certain collective agreements; in Upper Silesia, however, a table showing the beginning and end of work and rest periods is compulsory, even where there is no collective agreement.

§ 2. — Preparation and Amendment of Time-tables

In some countries, such as *China, Germany, and Great Britain*, the regulations merely state that the time-table or rules of employment shall be drawn up by the employer (the owner, manager or director of the mine).

Sometimes, however, there are fuller provisions on the manner in which the time-table shall be prepared. This is the case in *Belgium*, where the Rules of Employment Act of 1921 states that before any new rules or amendments to existing rules can come into force the workers must be notified by means of posting, and that within a week of this the workers may (themselves or through their representatives on the works council) enter their remarks in a book which is provided for the purpose. The workers are also entitled within the same period to submit remarks on proposed amendments to the labour inspector, who sends them on to the employer. In any case, new or amended rules may not come into force until a fortnight after posting. Lastly, the employer must send the probiviral court and the factory inspector a copy of the new amended rules when these become definitive.

In *Czechoslovakia* the rules containing the time-table must be approved by the mining authorities. In *France* the Decree governing hours of surface workers provides that a copy of the time-table and any amendments which may be made therein shall be sent beforehand to the mines inspector; and the Decree governing hours of work underground requires the time-table or amendments to be approved by the mines inspector before it may come into force. In *Poland* the procedure for preparation of the time-table is

governed by collective agreements, except in Upper Silesia, where the statutory regulations oblige the employer—whether a collective agreement has been concluded or not—to draw up the time-table in agreement with the workers' committee, or, failing this, with all the workers of the establishment. In *Spain* the Hours of Work Decree of 1931 states that the time-table relating to employment may not be amended without previous notification of the joint (employers' and workers') boards and the labour inspector. In the *U.S.S.R.* the tables relating to the times of shifts must be drawn up in agreement between the administration and the trade union organs of the undertaking.

§ 3. — Posting of Time-tables

Some national regulations require the management of every mine to post the time-table, or the document containing this, in a place where the workers can easily read it; there are provisions of this sort in *Australia, Belgium, China, Canada* (British Columbia and Nova Scotia), *Czechoslovakia, France, Germany, Great Britain, India, Japan, Netherlands, and Spain.*

The *Polish* general regulations contain no provision on this subject, but in Upper Silesia the time-table must be posted in every mining undertaking.

Sometimes more detailed provisions apply. In *Belgium* it is laid down that every worker is entitled to copy the posted rules. In *France* not only the time-table but also the overtime sheet must be posted in every workplace affected or any premises frequented by the workers not employed in buildings; for underground workers the pithead is the place chosen for posting. In *Great Britain* the legislation requires the time-table to be posted at the pithead (or in the engine-room for winding enginemen), and further requires the employer to supply a copy gratis to each underground worker who applies therefor at the office at which he is paid. In *India* the Mines Act provides that the time-table shall be posted "outside the office of the mine".

B. — REGISTERS, CARDS AND SLIPS

Some national regulations contain provisions requiring employers to keep a record of hours of work for supervision purposes, in the

form of registers, cards or slips. The main object of these provisions is to secure that exceptions to the general rules (overtime, etc.) are recorded.

In *Australia* the time sheets and pay sheets must be correctly written up by the employer and kept open to inspection by the authorities. In *Belgium* the Hours of Work Act of 1921 provides that all work done in overtime and the number of persons engaged on such work must be entered in a special register. In *Canada* the Alberta Act prescribes the keeping of a book for registration of the times at which workmen are lowered into and raised from the mine, the cases in which any workman is below ground for more than the time fixed, and the cause; in British Columbia and Nova Scotia the regulations merely state that the employer shall keep a record of the hours worked by each worker. In *China* the Factory Act states that a record shall be kept containing personal information on each worker and specifying the hours at which each shift starts and stops work. In *France* the Decree relating to surface work provides that if work is organised in shifts the list of workers in each shift shall be entered on a sheet or register kept strictly up to date and available for examination by the mines inspectors and the workers' delegates; further, the employer must keep a record of the dates and duration of exceptions on account of exceptional pressure of work. The Decree relating to underground work requires the management to enter all exceptions, whatever the cause, in a special register which must be available to the mines inspectors and to the workers' delegates at their request.

The legislation of *Great Britain* requires the management of every mine to keep a register, which must be open to inspection by the inspector; it must indicate the times at which men are lowered into and raised from the mine, the cases in which any man is below ground for more than the time fixed, and the cause; further, a register must be kept for winding enginemmen, in which they state the hours at which they commence and terminate employment on each day, and it must be initialled daily by the responsible official or the manager.

In *India* there must be kept in every mine a register of all persons employed therein, showing, for each person, the nature of his employment, the period of work fixed for him, the intervals and days of rest to which he is entitled and—when work is carried on in relays—the relay to which he belongs. Further, the local Governor may require the management to keep a register showing

at any moment the names of all persons then working below ground in the mine.

In *Japan* a slip in a prescribed form must be issued for each worker when he goes down the mine before the normal hour and when he returns to the surface after the normal hour for such return; these slips must be preserved for three years. In the *Netherlands* provision is made for the registration of all overtime worked underground; the records in question must be preserved for a year. In *Poland*, except Upper Silesia, the mine management must keep a special register in which the overtime done by every worker is recorded. In the *U.S.S.R.* an account book is issued to each worker whose contract runs for more than a week; each hour of overtime is entered in this book with the time at which work began and ended; the same data must be entered in a special register for the supervision of overtime.

C. — OTHER METHODS OF SUPERVISION

In *France* the Labour Code provides that the miners' safety delegates are required, apart from their ordinary functions, to notify infringements which they discover on their rounds, particularly regarding hours of work.

In *Great Britain* the workers may at their own cost appoint one or more checkweighmen or other persons to be at the pithead and observe the times of lowering and raising.

In *Spain* the standards of employment for coal mines in the provinces of Oviedo and León provide that in order to facilitate supervision the workers shall enter and leave the mine by shafts and adits to be selected by the mine officials.

In the *United States* the methods of checking hours of work are laid down neither by legislation nor by collective agreement; nevertheless provision is made in the agreements for checkweighmen, who keep close record of the tonnage mined and therefore probably of the hours kept by all time workers.

D. — PENALTIES

Most of the schemes, particularly those introduced by legislation, prescribe penalties for infringement of the provisions concerning work in general or more particularly concerning hours.

In *Australia* fines not exceeding £50 may be imposed for breaches of awards and agreements.

Belgian legislation provides that fines of from 26 to 200 francs (multiplied by the number of workers affected by the infringement but not exceeding 2,000 francs in all) or from one week's to one month's imprisonment may be imposed for infringement of Acts and Orders relating to hours of work. In case of a second offence within a year, the penalties are doubled. Workers may also be punished in case of obstruction to statutory supervision.

In *Canada* the Provincial Acts of British Columbia and Nova Scotia provide for fines, and those of New Brunswick and Saskatchewan for fines with imprisonment in case of failure to pay.

In *China* the Factory Act and the coming Mines Act provide for penalties in the shape of fines of up to 300 dollars.

In *Czechoslovakia* the penalties under the Act take the form of fines not exceeding 2,000 crowns, or imprisonment up to three months if the person guilty of infringement is insolvent. For a second offence the respective maxima are increased to 5,000 crowns and six months.

In *France* fines of from 5 to 100 francs for each worker illegally employed, but not exceeding 1,000 francs in all, may be imposed for infringement of provisions relating to hours of work. The Labour Code considers the management of the mine, and not any employed person, as responsible.

In *Germany* fines are imposed by legislation in similar cases. Both a fine and imprisonment may be incurred on a second offence intentionally committed.

In *Great Britain* any person who knowingly makes, causes or permits a false entry in the register of times of descent and ascent is liable to a fine not exceeding £25 in all. In case of other offences against the Coal Mines Acts of 1908 and 1911, the fine for each offence may amount to £20 for an owner, agent, manager or under-manager and £5 for any other person.

In *India* the Mines Act provides that contravention of the provisions respecting employment or presence in a mine may be punished with a fine extending to 500 rupees; obstructing inspection, falsification of records, etc., may be punished with a similar fine or imprisonment or both; and penalties ranging up to a fine of 2,000 rupees with imprisonment are provided in other cases (infringements involving accidents, repeated offences, etc.).

In *Japan* provision is made for fines not exceeding 100 yen.

In *New Zealand* fines may be imposed for breaches of the various provisions of the Coal Mines Act.

In *Poland* infringements of this sort are punishable with fines from 200 to 1,000 zlotys or imprisonment not exceeding three months, and with imprisonment for from a fortnight to three months in case of a second offence.

The *Rumanian* legislation imposes fines for infringement of hours of work provisions, the amount not to exceed 2,000 lei per person illegally employed and 10,000 lei in all. In case of a second offence the total may be 20,000 lei.

In *Spain* an employer responsible for infringement of hours of work regulations may be punished with a fine of from 500 to 2,500 pesetas, which is doubled for a second offence.

In the *United States* collective agreements provide for fines of from 1 to 2 dollars per worker for each infringement of the principal provisions of the agreements.

In the *U.S.S.R.* the penalties laid down for infringement of labour legislation are of two kinds: criminal penalties inflicted by the courts, and administrative penalties inflicted by the inspection services. The criminal penalties are imposed for breaches of the law; they consist in up to three months' hard labour or fines not exceeding 300 roubles; but when the infringement relates to a group of not less than three workers, is identical in respect of each, and was committed simultaneously with regard to the whole group, the penalty is imprisonment or forced labour for up to one year, or a fine of 10,000 roubles. The administrative penalties are imposed by the factory inspectors or the higher trade union officials; they consist of fines not exceeding 25 roubles in the former case and 100 roubles in the latter.

CHAPTER VI

CONCLUSIONS

The international regulations dealing with hours of work in coal mines include two Conventions—one adopted in 1931, and the revised Convention of 1935 which takes the place, in practice at least, of that of 1931. These measures were only prepared and voted with the greatest difficulty, after obstacles of all sorts—economic, technical, and political—had been overcome. Much of their text is the result of compromise, the fruit of laborious negotiation, and embodies a highly complicated combination of mutual concessions on the part not only of employers and workers but also of various Governments.

Further, the 1935 and 1936 Sessions of the Conference had to discuss the question of applying to coal mines the general Convention on the 40-hour week; in 1936 a proposed Draft Convention to introduce a shorter working week was submitted to the Conference, but at the final vote it did not receive the two-thirds majority necessary for adoption.

The drafting of the regulations now contemplated cannot be begun and continued without taking account of the results obtained by the previous efforts of the International Labour Organisation. A real contribution will undoubtedly be made to the rapidity and effectiveness of the work by referring to the Conventions of 1931 and 1935 and the proposed Draft Convention of 1936 whenever a problem now arising was solved on one of these occasions in a manner which may be considered satisfactory as it stands or easily adaptable to present conditions; and the numerous suggestions made in the past may serve as starting points in settling other problems.

It is for the purpose of extracting from the work of the Conference, the Governing Body, the many committees and other bodies, and of the Office, everything which may be helpful and relevant to the renewed study of the reduction of hours of work in coal mines

that the following pages have been written: they contain a brief history of the previous efforts of the International Labour Organisation in this field, and then show how the problems raised by the proposed international regulations present themselves in the light of past solutions, of suggestions for future action, and of the present state of national laws and regulations.

According to the customary procedure, a final section indicates the points relating to the proposed international regulations, on which the Conference might suitably instruct the Office to consult Governments.

A

PREVIOUS WORK OF THE INTERNATIONAL LABOUR ORGANISATION

§ 1. — Enquiry into Conditions in the Coal Industry Referred to the Organisation (1925)

The post-war depression in the coal industry dealt a cruel blow at the prosperity of the coal-producing countries and reacted disastrously on the position of the miners. The latter, being thus directly affected, began to look for remedies for the depression, which in their opinion was principally due to the anarchical condition of the mining industry. Their aim was to organise coal production on an international scale, just as it had already been organised on a national scale in certain countries. This programme was put forward in the resolution adopted at Brussels in 1925 by the Committee of the International Miners' Federation, which raised for the first time the problem of the international standardisation of conditions of work in coal mines.

In this resolution the International Miners' Federation declared:

"Whereas in certain coal-producing countries economic difficulties are such as to lead to continually increasing unemployment among miners and the lowering of their standard of living;

"Whereas these economic difficulties arise very largely from competition and commercial rivalry in the international coal market;

"Whereas this competition and commercial rivalry is more acute and embittered by reason of the differences in the working conditions existing in the principal coal-producing countries;

"The Committee decides that efforts should be made to secure the standardisation of working conditions of miners on an international basis."

But the Committee realised that it was not completely informed on the subject, and that an enquiry on hours of work, annual holidays with pay, and wages in the principal coal-producing countries must first of all be undertaken.

The resolution therefore continued:

“ In order that the proposed investigation may be as thorough as possible and that the enquiry may be completed with the least possible delay, the Committee also decides to appeal to the International Labour Office for assistance and the co-operation of the means of investigation at its disposal.”

This resolution was brought before the Seventh Session of the International Labour Conference by Mr. Mertens, Belgian workers' delegate, in June 1925, and the Conference itself then adopted a resolution requesting the Governing Body to consider the conditions under which the International Labour Office could initiate and carry out an investigation into hours of work, annual holidays with pay, and wages.

§ 2. — The Governing Body Committee on Conditions of Work in Coal Mines and the Enquiries into Hours of Work (1925-1928)

In the following October, the Governing Body of the International Labour Office, in its turn, instructed the Office to proceed with this enquiry with a view to publishing all the comparable statistics which it might be able to collect relating to the hours of work, paid holidays, and wages of miners in most of the coal-producing countries of the world. Further, the Governing Body set up a special committee of its own to follow the work of the Office in this field.

The Office started its research at once, and in 1928 it published a first report on hours of work and wages in coal mines ¹.

¹ *Wages and Hours of Work in the Coal-Mining Industry*. Studies and Reports, Series D., No. 18, Geneva, 1928; see also article by F. MAURETTE in the *International Labour Review* (Vol. XVII, No. 6, June 1928): “An Enquiry into Working Conditions in Coal Mines”.

This first enquiry, which related to the year 1925, was followed by three others relating to 1927, 1929, and 1931, the results of which were published in the *International Labour Review* ((1): Vol. XX, Nos. 4 and 6, October and December 1929 and Vol. XXI, No. 1, January 1930; (2): Vol. XXIII, No. 5, May 1931; (3): Vol. XXVIII, No. 3, September 1933). More recently the Office has carried out a new enquiry relating to the years 1933, 1935, and 1936, the results of which are published in another part of the present Report. A study of annual holidays with pay for coal miners has also appeared in the *International Labour Review* (Vol. XXI, No. 2, February 1930). A further study of the question is contained in the report to the Technical Tripartite Meeting on the Coal Industry to be held in May 1938.

This enquiry required over two years' work, for it was necessary first of all to prepare methods of calculating hours of work and wages by which the available data—relating to extremely complex questions, treated moreover in widely different ways in the different countries—could be reduced to comparable figures. As regards hours of work, the enquiry in fact included an examination of the methods of calculation in use in the different mining countries and resulted in an international method of calculation on which all the subsequent work of the International Labour Organisation with regard to coal mines has been based.

§ 3. — The Depression Deepens. Intervention of the League of Nations (1928-1929)

While the International Labour Office was engaged in this scientific research, that is to say, between 1925 and 1928, the coal situation was developing and the depression in the industry increasing in gravity. Its international character was becoming more and more apparent, and increasing reference was being made to the necessity for international remedies, whether economic or social in character. During 1928 two large workers' organisations urged the League of Nations and the International Labour Organisation to take up the question for immediate action; they proposed, further, that the 7-hour day should be taken as the basis for the international regulation of hours of work in coal mines¹.

¹ The following were the resolutions voted by the two organisations in question:

International Miners' Federation (Nîmes, June 1928):

" 1. The Congress, having heard the discussion on the coal problem, demands that the International Labour Office and the Economic Organisation of the League of Nations shall call a world conference of coal-producing countries, and that the International Committee of Mine Workers shall prepare a case and secure representation with equal rights to put the miners' case concerning the whole subject.

" 2. The Congress, considering it highly desirable that hours of labour in the coal industries of the different nations should be equalised at 7 hours a day, 'from bank to bank', in accordance with the general lines of its previous Resolutions, requests the Governing Body of the International Labour Office to call a special Conference of coal-producing countries to achieve this end."

International Congress of Christian Miners' Unions (Munich, September 1928):

" The International Congress of Christian Miners reiterates its demand for the introduction of a seven-hour day in the mines. The Congress places on record that its repeated demands for a shorter working day in

The Governing Body took these requests into account, and in October 1928 it instructed the Office to provide the Committee on Conditions of Work in Coal Mines with a report on the standardisation of hours of work in mines. Then, in May 1929, endorsing the suggestion made by its Committee, the Governing Body further instructed the Office "to formulate precise and detailed proposals for the study of the question, taking into account the possibility of setting up at a later date a special committee empowered to assist in this work". It was understood that this special committee should consist of experts designated by Governments, employers, and workers.

Meanwhile the Council of the League of Nations had also taken account of the resolution adopted by the International Miners' Federation; in June 1928 it requested the Economic Committee of the League to study the coal problem as a whole; and the report of this Committee on the problem contemplated international action, saying *inter alia*:

"The miners' experts considered that it was desirable that an international understanding should be reached concerning hours, wages, and social conditions. It was not claimed that such an understanding would, or should, bring about uniformity of conditions, or that it would in itself solve the problem of the industry. But it was agreed that it would do something and that, in the absence of an agreement on these points, an *entente* on other questions . . . might prove unstable.

"The miners' experts were anxious that, if competition were checked at one point, it should not be deflected so as to act with still greater force against their interests. They urged, moreover, that there are employers' organisations in all countries adequate for the immediate undertaking of such negotiations."

In September 1929 the Tenth Assembly of the League of Nations, after hearing a report by Mr. Graham, President of the British

the mines have so far not met with sufficient attention. Compared with hours of work in other trades, the hours of miners employed underground are far too long. Even persons in other trades feel that it is unjust that the miners, whose occupation is recognised as unhealthy and dangerous, should be compelled to work so long underground. When formerly 10 to 12 hours a day were generally worked in all trades, the miners in the more important countries had the benefit of an 8- to 9-hour day.

"The Congress appeals to the International Labour Office. It urges it not to limit its action to enquiries, but to put a stop to the wrongs inflicted on miners. It is the duty of the International Labour Office to take more energetic measures than in the past to promote the introduction of a 7-hour day, a legitimate claim of the miners. The Congress expects the various Governments of the mining countries to give it more support in its efforts to obtain satisfaction in respect of this claim. The miners of all countries should, by joining the workers' associations, take a personal share in promoting the success of this claim, and in particular oppose the practice of working overtime where such practice exists."

Board of Trade, gave a tangible form to these demands by suggesting, on the recommendation of the British and French Delegations, that the Governing Body of the International Labour Office should consider:

The advisability of convening at an early date a preparatory technical conference . . . to advise it as to what questions relating to conditions of employment in coal mines might best be included in the agenda of the International Labour Conference of 1930 with a view to arriving at practical international agreement ¹.

¹ The full text of the Resolution adopted by the Tenth Assembly of the League of Nations was as follows:

"The Assembly expresses its sincere appreciation of the work performed by the Economic Committee in investigating the causes and effects of the present difficulties confronting the coal industry, and congratulates it upon the illuminating interim report which it has already issued."

"It notes the statement of the Economic Committee in its interim report that 'as regards the third of the proposals for international action—that which relates to wages and hours—we will confine ourselves at this stage to saying that action in this field would appear to fall within the competence of the International Labour Office, not that of the Economic Organisation of the League'."

"It further understands that the International Labour Organisation has been conducting enquiries as to hours, wages and conditions of work in coal mines since 1925, and that for several months the Governing Body has had under consideration a request from the Congress of the International Miners' Federation, which met at Nîmes last year, to convene a Conference of the principal coal-producing countries with a view to the equalisation and reduction of hours of work."

"Owing to the great urgency of the matter, the Assembly is of opinion that the International Labour Organisation should pursue its work without delay, and accordingly invites the Council to request the Governing Body of the International Labour Office to consider the inclusion in the agenda of the International Labour Conference of 1930 of questions relating to hours, wages and conditions of work in coal mines, with the object of agreeing upon an international Convention or Conventions thereon, while in the meantime the Economic Committee will consider its final report, which together with the interim report will be available to the Conference referred to in his Resolution."

"The Assembly further suggests that the Governing Body should consider the advisability of convening at an early date a Preparatory Technical Conference consisting of representatives of the Governments, employers, and workers of the principal coal-producing countries of Europe, in order to advise it as to what questions relating to conditions of employment in coal mines might best be included in the agenda of the International Labour Conference of 1930, with a view to arriving at practical international agreement."

"The Assembly invites the Council, on the one hand, to consider the recommendations which the Economic Committee may formulate as a result of the meeting of experts convened for 30 September with regard to the difficulties at present encountered in the coal industry, in particular the fluctuations in price and the existing difference between production and consumers' needs, and, moreover, to consider, taking into account more especially the results of the examination, the expediency of convening a Conference of the Governments concerned to study the recommendations in question."

§ 4. — The Preparatory Technical Conference (1930)

The Council of the League of Nations approved the Assembly's Resolution, which was transmitted for consideration to the Governing Body of the International Labour Office.

Thus the procedure was set in motion which was to end some two years later in the adoption by the International Labour Conference of a Draft Convention limiting hours of work in coal mines.

The Governing Body examined the Resolution of the League of Nations in October 1929, and took the line of action indicated therein. Realising "the importance of the questions raised in this Resolution and also the importance of making an immediate contribution to the general study of the coal problem now being pursued by the League of Nations on its own initiative", it decided "to convene, at the beginning of January 1930, a Preparatory Technical Conference consisting of representatives of the Governments, employers, and workers of the principal coal-producing countries of Europe, in order to advise it as to what questions relating to conditions of employment in coal mines might best be included in the agenda of the International Labour Conference of 1930, with a view to arriving at practical international agreement".

In accordance with this decision, a Preparatory Technical Conference was convened at Geneva, where it sat from 6 to 18 January 1930. It included representatives of the Governments, employers, and workers of nine European countries: Austria, Belgium, Czechoslovakia, France, Germany, Great Britain, Netherlands, Poland, and Spain¹. Composed solely of experts, it enjoyed great authority on all technical questions and did useful work. It had to consider questions concerning hours, wages, and other conditions of employment in coal mines, and its main purpose was to suggest to the Governing Body which of these questions it considered could most usefully be placed on the agenda of the Fourteenth Session of the International Labour Conference in 1930 with a view to arriving at an international agreement.

In accordance with its terms of reference, the Technical Conference cleared the ground and showed, first of all, that among the condi-

¹ The Governing Body had decided to invite to its Technical Conference representatives of the nine European countries from which the Economic Committee of the League of Nations had chosen its experts.

tions of employment in coal mines only one, namely hours of work, could in the existing circumstances be made the subject of a practical agreement as desired by the Tenth Assembly of the League of Nations. It next considered carefully the substance of the international regulations that it recognised were necessary, expedient, and possible, and it adopted as a basis for discussion the proposed Draft Convention prepared for the purpose by the International Labour Office. It had not time to study all the points put forward, but on the essential questions of scope, method of calculating hours of work, and overtime, it put forward in its report to the Governing Body proposals stamped by its intimate experience of mining questions, and thus facilitated future work.

§ 5. — Preparation of the Hours of Work (Coal Mines) Convention (1930-1931)

Meeting in February 1930, the Governing Body acceded to the suggestion of the Preparatory Technical Conference and placed the question of the reduction of hours of work in coal mines on the agenda of the International Labour Conference for 1930. The Governing Body had also before it the question whether a final decision should be taken at the Fourteenth Session of the Conference without employing the usual double-discussion procedure, or whether, on the contrary, the problem should be examined at the Fourteenth Session as a first discussion with a view to the taking of a decision at a later session. The Governing Body did not feel that it should make any definite suggestion to the Conference; but the report of the Office contained a proposed text for a Draft Convention so that the Fourteenth Session of the Conference might be able to take a final decision at once if it so desired.

Meanwhile the Office had been continuing its research on a more limited subject, that of lignite mines. This question had been raised at the Preparatory Technical Conference by the German Government delegate, who had suggested that lignite mines should be excluded from the scope of the proposed regulations. At the close of a long discussion, the Technical Conference, while provisionally retaining all coal mines in the draft which it proposed, adopted the following resolution with regard to lignite mines: ". . . Pending the collection of the information to be obtained by the Office, it is not possible to determine at present to what extent and by what methods the provisions of the proposed Convention can be applied to underground work in lignite mines."

Thus the Technical Conference suggested a supplementary enquiry into the lignite industry, the results of which would enable the International Labour Conference to take a decision with a full knowledge of the facts. In conformity with this resolution, the Governing Body instructed the Office to undertake such an enquiry, the results of which were ready in time for submission to the Conference¹.

The question of hours of work in coal mines thus came before the International Labour Conference at its Fourteenth Session (June 1930). The Conference, not without some difficulty, suspended the operation of the double-discussion procedure and—taking the draft submitted to it by the Office as a basis of discussion²—organised its work with a view to the immediate adoption of a Draft Convention.

This result was not achieved. When the final vote was taken, the proposed Draft Convention, which applied only to anthracite and bituminous coal, and proposed that there should be a separate Convention for lignite, failed to obtain the two-thirds majority necessary for its adoption. The voting was 70 in favour and 40 against: 73 votes were needed for adoption. Immediately after this vote, however, the Conference decided by a large majority to place the question of hours of work in coal mines on the agenda of its next session. Further, it adopted supplementary resolutions dealing respectively with the application of the Washington Hours Convention to surface workers and the placing of the question of hours of work in lignite mines on the agenda of the 1931 Session.

Between the two sessions of the Conference, the Governments directly concerned established contact, and held a semi-official meeting in Paris in December 1930 (as they had done at the same place in the preceding March); here they considered the points on which they were essentially at variance, defined their respective positions, indicated the utmost concessions they considered possible, and together sought terms for acceptable compromise. These

¹ The results of this enquiry were set out in a supplement to the report on hours of work in coal mines to the 1930 Session of the Conference: *International Labour Conference, Fourteenth Session, Geneva 1930. Report III, Supplement: Hours of Work in Coal Mines—Enquiry into the Lignite Industry in Europe* (Survey of the Replies of the Governments).

Further, the Office published two articles on this subject in the *International Labour Review*: 1. "The European Lignite Industry" (Vol. XXII, No. 6, December 1930, and Vol. XXIII, No. 1, January 1931); 2. "The Present State of the Lignite Industry in the Various European Countries" (Vol. XXIII, No. 5, May 1931).

² *International Labour Conference. Fourteenth Session, Geneva, 1930. Report III, Hours of Work in Coal Mines.*

conversations proved most fruitful and greatly facilitated the success of the 1931 Session¹. The change in the attitude of several Government delegations is sufficient evidence of this; in 1930, out of 28 Governments voting, 22 were in favour of the Draft Convention and 6 against; in 1931, 32 Governments voted, 31 in favour and 1 against.

Finally, the Fifteenth Session of the International Labour Conference (May-June 1931) proved successful. Although, on a strict interpretation of the Standing Orders of the Conference, the question was a new one on the agenda, the Conference decided, as in the previous year, to have only one discussion, in view of the fact that the Preparatory Technical Conference and the 1930 Session had discussed all the aspects of the problem. By 81 votes to 2 it adopted a Draft Convention limiting hours of work in coal mines and applying to all coal mines, including lignite mines.

§ 6. — Attempts at Simultaneous Ratification. Revision of the Draft Convention (1931-1935)

Article 18 of the Draft Convention thus adopted in 1931 provides that:

"It shall come into force six months after the date on which the ratifications of two of the following Members have been registered by the Secretary-General of the League of Nations: Belgium, Czechoslovakia, France, Germany, Great Britain, Netherlands and Poland."

Efforts were immediately made to secure enforcement of the Convention. On the initiative of the British Government, an unofficial meeting of representatives of the Governments of the seven States named in Article 18 was held at Geneva in January 1932, to consider the means by which the Convention could be ratified as soon as possible. The discussion at that meeting made it clear that Governments were in general agreed that the Convention should be simultaneously ratified by the seven States; but at the same time it was recognised that such simultaneous ratification was not immediately possible. It was therefore decided to hold a further meeting at some later date.

A second unofficial meeting of representatives of the same Governments was accordingly held at Geneva on 20 February 1933. At this meeting the British representative brought forward two

¹ *International Labour Conference, Fifteenth Session, Geneva, 1931. Report II, Hours of Work in Coal Mines.*

difficulties—one relating to the prohibition of Sunday work and the other to necessarily continuous operations—which in his Government's opinion prevented it from ratifying the Convention. In view of these difficulties, the meeting considered that simultaneous ratification did not appear possible at the moment, and that no further unofficial meeting could usefully be contemplated until the Office had collected information as to the manner in which these two points were dealt with in the other States concerned. The Office accordingly requested the six other Governments to supply information upon these points.

In the meantime the Seventeenth Session of the Conference (June 1933) adopted a resolution requesting the Governing Body to examine all action likely to hasten the ratification of the Convention and in particular to consider the desirability of convening a tripartite conference of representatives of Governments, mine owners and miners of the seven countries referred to in Article 18, with a view to facilitating the simultaneous and early ratification of the Convention by these seven States.

The Governing Body discussed what action should be taken on this resolution at its Session of October 1933, and again at its Session of January 1934, when it had before it the answers received from the Governments to the Office's request for information mentioned above. These replies showed that the difficulties met with in Great Britain were also encountered to a certain extent in Belgium and France. The Belgian Government's answer also referred to a further difficulty, relating to the work of underground storekeepers and enginemmen.

The Governing Body accordingly decided to coven a tripartite meeting to which the seven States named in Article 18 of the Convention would be invited, and to which the correspondence exchanged with these Governments on the difficulties some of them were finding in ratification would be submitted. Governments of other Members of the Organisation were invited to send representatives to the meeting and to express their views if they so desired.

Before the Tripartite Meeting was held, further communications were received from the Belgian and Netherlands Governments. The Belgian Government drew attention to another difficulty relating to the weekly change-over of shifts engaged in continuous operations, which it had not previously mentioned, while the Netherlands Government proposed that allowance should be made in the Convention for the application of the spread-over system, under which, by an appropriate distribution of hours, no work

is done on one afternoon in the week or one day in the fortnight without any change in the total number of hours worked in the week or fortnight.

The whole of the correspondence thus received from the Governments; containing an account of the five difficulties which had been raised, was placed before the Tripartite Meeting, which was held on 26 and 27 June 1934. Governments, coal mine-owners', and coal miners' representatives were appointed to attend the meeting on behalf of Belgium, Czechoslovakia, France, Great Britain, the Netherlands, and Poland. Government observers were also present on behalf of Chile, Hungary, Italy, Japan, and Spain.

The Meeting considered the various difficulties one by one, and in each case the discussion showed that one or more Governments were of opinion that the attention of the Governing Body should be called to the desirability of considering the partial revision of the Convention. Further, the Government representatives of Belgium, France, Great Britain, and the Netherlands expressed the willingness of their Governments to bring the Convention into force by means of simultaneous ratification, if the difficulties which they had brought forward could be satisfactorily dealt with. The representative of the Netherlands Government stated that his Government was ready to examine proposals for revision if sympathetic attention was given to its own difficulty in connection with the spread-over. The representatives of the Czechoslovak and Polish Governments stated that their Governments were prepared to ratify the existing Convention simultaneously with the other States concerned.

The Governing Body considered the matter at its Session of September 1934 and, in view of the situation resulting from the discussions of the Tripartite Meeting and the nature of the difficulties brought to its notice, came to the conclusion that the procedure for partial revision of the Convention should be opened. It therefore took the necessary steps so that the question might be included in the agenda of the Nineteenth Session of the Conference in 1935.

In due course, at its Session of January-February 1935, the Governing Body formally placed the question on the agenda, revision to relate to the following points:

- (1) the prohibition of Sunday work;
- (2) continuous operations;
- (3) underground storekeepers and enginemen;
- (4) men in charge of main underground ventilation and pumping machinery.

The question of the spread-over was not placed on the agenda of the Conference; neither was a proposal by the workers' group of the Governing Body for a further reduction of hours of work, since this point already appeared on the agenda of the coming session.

Revision was also to be considered in respect of the standard article relating to the legal consequences of revision, for the purpose of making it uniform with the corresponding articles in other Conventions to be submitted to the Conference.

The Nineteenth Session of the Conference adopted without discussion the changes in the Convention proposed by the Committee which it had set up to that effect. Of the statements preceding the vote, reference should be made to that of the Netherlands Government delegate, who expressed regret that the question of the spread-over had not been examined; the British Government delegate stated that he would have wished the revised Convention to lay down definite limits for the new exceptions allowed; and several Government delegates pointed out that their attitude with regard to the Convention had not changed, and that they were ready to ratify it provided it was ratified simultaneously by the seven countries named in the text.

§ 7. — Attempts at a Reduction of Hours in Coal Mines

1. 1933 AND 1934 SESSIONS OF THE CONFERENCE

A year after the adoption of the Convention of 1931 the International Labour Organisation took up for consideration the vast problem of a general reduction in hours of work, and this question was placed on the agenda of the Seventeenth Session of the Conference in 1933. In case the Conference should decide to hold a single discussion only, the International Labour Office had prepared three proposed Draft Conventions concerning the reduction of hours in industrial undertakings, in commercial and similar establishments, and in coal mines respectively.

As regards this last subject, the Office had proposed a draft "concerning the adaptation to coal mines of the principle of a 40-hour week"¹, which took the 1931 Convention as a starting

¹ *International Labour Conference, Seventeenth Session, Geneva, 1933. Report V: Reduction of Hours of Work.*

point and made certain changes and additions with a view to limiting working time to 38 hours 45 minutes in the week.

The Conference decided that the reduction of hours of work was a suitable subject for a Draft Convention or Recommendation, that only a first discussion should take place at that session, and that the matter should be placed on the agenda of the following session with a view to the second discussion.

The questionnaire prepared by the Office on the basis of the Conclusions adopted by the Conference was communicated to Governments; it included a question as to whether coal mines should be covered by separate regulations or included in the scope of a Convention applying to industrial undertakings generally.

The replies showed a pronounced majority in favour of the principle of a special Convention¹. Nevertheless, the Office did not consider itself justified in submitting to the Eighteenth Session of the Conference (1934) proposals for a separate Draft Convention dealing with coal mines. Among the reasons given, the most important related to the necessity, before going further, of removing the obstacles to ratification of the 1931 Convention. In particular it seemed advisable to have the opinion on this subject of the Tripartite Meeting which had been convoked to examine the difficulties in question, and which was not to meet until after the Conference itself.

It will be remembered that the Eighteenth Session of the Conference could not arrive at a sufficient measure of general agreement concerning the drafts submitted to it by the competent Committee. The quorum was not obtained in the first vote taken, that on Article 1 of the proposed Draft Convention concerning industrial undertakings, and consequently the Conference could make no further progress on the lines hitherto followed; but it adopted a resolution which, while endorsing the principle of the reduction of hours of work and declining to abandon the attempt to give effect to the principle through some form of international regulations, provided for the possibility of a new line of approach to the solution which it had not so far been able to achieve. In this resolution the Conference requested "the Office to obtain further information and the Governing Body to place once more the question of the reduction of hours of work upon the agenda of the next session of the Conference, for the adoption of one or more Draft Conventions."

¹ *International Labour Conference, Eighteenth Session, Geneva, 1934. Report I: Reduction of Hours of Work.*

This resolution came before the Governing Body in September 1934 and again in January 1935, at which Session the following question was placed on the agenda of the Conference for 1935: the reduction of hours of work, with special reference to:

- (a) public works undertaken or subsidised by Governments;
- (b) iron and steel;
- (c) building and contracting;
- (d) glass-bottle manufacture, and
- (e) coal mines.

The Governing Body left it to the Conference to decide whether it would deal with the item by way of a single discussion or by the usual double-discussion procedure, but instructed the Office to prepare a report which would enable the Conference to adopt whichever of the two procedures it preferred ¹.

2. 1935 SESSION OF THE CONFERENCE

At the Nineteenth Session, the general discussion on the reduction of hours of work ended in the adoption of a Draft Convention concerning the 40-hour week. Under its terms, each Member which ratifies the Convention "undertakes to apply this principle to classes of employment in accordance with the detailed provisions to be prescribed by such separate Conventions as are ratified by that Member".

Having adopted this Convention, the Conference examined the reports of its committee on the reduction of hours of work relating to the application of the principle of the 40-hour week, by means of separate Conventions, to the different groups of industries on the agenda.

Although this committee's sub-committee on coal mines had voted for the double-discussion procedure, the committee was itself in favour of a single discussion, and the sub-committee therefore prepared the text of a Draft Convention. But the Conference in its turn decided for double discussion and placed the question on the agenda of its next session for the second stage of the procedure.

There was one feature of the 1935 Session which distinguished it from others—the participation of the United States of America;

¹ *International Labour Conference, Nineteenth Session, Geneva, 1935. Report VI: Reduction of Hours of Work, Vol. V. Coal Mines.*

but the representatives of that country did not play an active part, and merely pointed out that the committee's draft, which had been framed before the United States was a Member of the Organisation, had not taken the particular circumstances of their country into account and would have to be altered in order to be applicable to those circumstances.

3. 1936 SESSION OF THE CONFERENCE

With a view to preparing for the second stage of the procedure, the Office sent to Governments a questionnaire drawn up, in accordance with the indications given in the various discussions which had taken place. The replies enabled it to draw up and submit to the Twentieth Session of the Conference in 1936 a draft for a Convention which also took the position of the coal industry in the United States very largely into account¹.

The committee appointed to examine this draft made certain changes in it, prompted by a desire to adapt the text of the Convention as satisfactorily as possible to the special conditions under which hours of work are regulated in the United States coal mines. One such point, however, could not be taken into account, namely the inclusion of surface workers in the scope of the regulations. The proposed Draft Convention thus framed was submitted to the Conference: at the first vote there were 60 votes in favour and 37 against, but at the final vote the necessary two-thirds majority was not obtained and the proposed Draft Convention was not adopted.

4. CONVENING OF THE TRIPARTITE TECHNICAL MEETING (1936-1938)

Nevertheless, the 1936 Session of the Conference considered that the question of reducing hours of work in coal mines should not be dropped. A resolution moved by the Government delegates of France and the United States was adopted, requesting the Governing Body of the International Labour Office to consider the convening of a tripartite technical conference of Governments and of employers' and workpeople's representatives in the coal-mining industry with a view to reaching an understanding as to hours of work in this industry, account being taken of the report of the committee on hours of work in coal mines.

¹ *International Labour Conference, Twentieth Session, Geneva, 1936. Report VI: Reduction of Hours of Work in Coal Mines.*

When the Governing Body discussed the effect to be given to this resolution at its Session of February 1937, it instructed the Office to inform the Governments concerned that it proposed to call a conference of this kind, and to ask them whether they had any observations to make on the proposal. At a subsequent session, after taking note of the observations communicated to the Office by certain Governments and also of a draft programme of work for the meeting prepared by the Office, the Governing Body definitely decided to call the Meeting and defined its object.

The Meeting was to be convened at Geneva on 2 May 1938. Its agenda was to be consideration of the question of the reduction of hours of work in coal mines, account being taken of the economic and social factors which might have a bearing on hours of work in that industry.

The Meeting was to consist of delegates of all countries where coal production is an important element in national economic life. It was for each Government to decide whether it regarded its own country as one of those in which this condition was fulfilled.

Each Government taking part in the Meeting was invited to appoint three representatives, including one Government representative, one employers' representative, and one workers' representative, and each of these representatives might be accompanied by experts acquainted with the problems of the coal mining industry. The Meeting was also to include a delegation from the Governing Body of the International Labour Office.

At the same time, the Governing Body instructed the International Labour Office to prepare a report corresponding to the question placed on the agenda of the Meeting, to be used as a basis for discussion.

§ 8. — New Factors, National and International

1. THE QUESTION OF THE GENERALISATION OF THE REDUCTION IN HOURS REOPENED

Meanwhile, at its Twenty-third Session (1937), the Conference had adopted a resolution requesting the Governing Body to "consider placing on the agenda of the next session of the Conference the question of the generalisation of the reduction of hours of work in all economic activities which are not covered by the Conventions already adopted".

The Governing Body examined this resolution at its session of October 1937, and decided to place the question of the generalisation of the reduction of hours of work on the agenda of the Conference. It was further decided that the question should be considered as coming up for first discussion, i.e., that it should be followed by a consultation of the Governments, the results of which would be submitted to the 1939 Session with a view to the preparation of a Draft Convention; and that the Office should draw up a grey report which would enable the International Labour Conference to take a decision as regards all the classes of workers to be covered in the consultation of Governments.

The question of reducing hours of work in coal mines thus appears once more within the framework of a proposed generalisation of the shorter working week. This situation is somewhat similar to that of 1933 and 1934, but with the difference that in the meanwhile the Convention of 1931 has been revised and that there now appears to be no technical obstacle to its application.

2. REDUCTION OF HOURS IN VARIOUS COUNTRIES

Meanwhile, also, the situation has rapidly developed in the national field. During recent years numerous laws and regulations have been adopted, resulting in reduced hours in the mining industry of several coal-producing countries. The 45-hour week has for instance been introduced in Belgium and Poland, the 40-hour week in Italy, New Zealand, and Spain, the week of 38 hours 40 minutes (underground) and 40 hours (surface) in France, and the week of 35 hours (time spent at the workplace, not including breaks for meals) in the United States.

These events place the new attempt at reducing hours in circumstances clearly more favourable than those which had attended previous efforts.

B

PROBLEMS RAISED BY INTERNATIONAL REGULATIONS TO REDUCE HOURS OF WORK

I. — *FORM OF REGULATIONS*

Convention or Recommendation ?

According to the Constitution of the International Labour Organisation, international regulations may take the form of a

Recommendation or a Draft Convention. In view of the existence of the 40-Hour Week Convention (1935) and of the 1931 and 1935 Conventions on hours of work in coal mines, the proposed international regulations to reduce hours in coal mines can, it would appear, only take the form of a Convention.

II. — *NATURE OF REGULATIONS*

General or Special ?

The problem of the reduction of hours of work in coal mines is now raised as part of the wider question of the generalisation of the reduction of hours of work. It must therefore be decided whether the proposed international regulations, in so far as they concern coal mines, shall be embodied in a general Convention applying to all employment (or at least to all industry proper) or in a special Convention for these mines. The question is not a new one, since, as is stated above, it arose in exactly the same manner in 1933 and 1934. In the former year the Office proposed a special Convention, and a great majority of the replies to the questionnaire, sent out to Governments in preparation for the 1934 Session of the Conference, were in favour of this course.

The arguments advanced for such a solution in 1933 and 1934 are not out of date to-day—on the contrary, they are more cogent than ever.

Technically, a special Convention would appear preferable by reason of the highly peculiar nature of the problems which a regulation of hours of work in the coal industry must necessarily solve—an industry so clearly set apart from the others as regards material conditions, working methods, and the manner in which work is organised. Special provisions are obviously indispensable, and these would complicate a general Convention without any compensating advantage. Moreover, such provisions could only interest a small number of countries.

Again, several features of the situation of fact, national and international, deserve consideration.

Some countries, Great Britain for instance, have regulated hours of work (underground) in coal mines by legislation, although they have not yet done so for other industries. A larger number of countries have different sets of regulations for mines (and particularly for coal mines) on the one hand, and for the remaining industrial groups

on the other. Further, in several important coal-producing countries hours of work in the mines, at least for underground workers, are shorter than those prevailing in industry in general; this applies more particularly to Belgium, France, Poland, Spain, the United States, and the U.S.S.R. These circumstances show in the first place that the adoption of international regulations for reducing hours of work in coal mines would be easier in the case of a special Convention than of one applying to all industry, and secondly that a special Convention, if adopted, would have more chance of ratification than a general one.

Lastly, in the international field, account must be taken of the existence of special international regulations relating to hours of work in coal mines—the result, as is shown above, of tireless efforts throughout a dozen years, and of mutual concessions from the various parties concerned—Governments, employers, and workers. It would appear logical that this international campaign, which has so particular a field and which so many experts have unremittingly assisted, should continue in the same form now that another step towards the reduction of hours in this industry is to be attempted.

III. — *QUESTIONS RELATING TO UNDERGROUND WORKERS*

§ 1. — Scope

The scope of the proposed international regulations must be considered from two points of view—that of the mines and that of the persons to be covered.

1. SCOPE AS REGARDS MINES

The Conventions of 1931 and 1935 relate to “all coal mines”, and define as a coal mine “any mine from which only hard coal or lignite, or principally hard coal or lignite, together with other minerals, is extracted”. They thus apply to all mines from which solid mineral fuels are extracted, excepting peat. The use of the term “hard coal” (in French *houille*) is however confusing, for it is sometimes employed for only one type of coal, and the end in view was to cover every type other than lignite, and therefore also bituminous coal, which in some countries, such as the United States

is classified as "soft coal". Therefore, in the proposed Draft Convention submitted to the 1936 Session of the Conference, the Office suggested the following formula, which, though briefer than that previously employed, is far more exact and leaves no doubt as to its meaning: "This Convention applies to all mines from which coal, including lignite, is the only or principal mineral extracted".

This was accepted by the competent committee and appeared in the proposed Draft Convention submitted to the vote of the Conference.

The Question of Lignite

The question of including lignite mines in the Convention of 1931 gave rise to much discussion at the Preparatory Technical Conference of 1930 and at the 1930 and 1931 Sessions of the Conference.

At the Preparatory Conference the German Government delegate, for economic reasons, suggested that lignite mines should not be included in the scope of the proposed regulations for coal mining. This point of view was opposed not only by means of other economic arguments but also by social and technical arguments, which were in turn met by the opponents of assimilation with objections of a like character. These arguments were closely examined in the memorandum accompanying the questionnaire which the Office sent early in 1930 to the Governments in lignite-producing countries, and then in an article on the "European Lignite Industry" which the Office published in the *International Labour Review*¹ and which drew on the information obtained from its enquiry into the lignite industry. They were summarised as follows in this article.

The *economic arguments* are of two sorts: some have purely national force; others international force.

Adopting the national standpoint, certain countries maintained that their lignite industry has to withstand severe competition from the coal industry proper, and that it could not bear a reduction in the present hours of work without endangering its development and even its very existence. This apprehension concerns more especially certain German lignite fields, where the operating conditions in the mines on the outskirts of coalfields (*Randreviere*) are less favourable than in those in the centre of the coalfield (*Kernreviere*). It was explained that in fact the stratification in the central mines makes it possible to organise extensive surface workings, whereas in the outlying mines the stratification in most cases requires underground working by smaller undertakings. In the underground workings it is difficult to use machinery and extraction has to be carried on mainly by hand, with the result that much lignite

¹ Cf. footnote 1, p. 117.

is lost and working expenses are considerably heavier. In these circumstances it is difficult for the costly fuel from the outlying mines to compete with the cheaper fuel from the central mines. A reduction in hours of work in the outlying mines, which would lead to a distinct reduction in output and hence to an increase in the cost of production, would endanger their existence.

Italy pointed out that it is already very difficult for lignite, the most economical use of which seems to be the generation of electric power, to hold its own against hydro-electric power, and that any working conditions less favourable than the present system would be disastrous for her lignite mines.

From the international point of view, it was maintained that the international regulation of hours of work in lignite mines would in no way help to end the depression in the coal-mining industry, a remedy for which would have to be sought within the bituminous coal and anthracite industries. In support of this view it was argued that the output of lignite is small, amounting to only an insignificant proportion (about 4 per cent.) of the total world output of coal. Further, this fuel, owing to its specific qualities, is, calorie for calorie, much heavier and bulkier than the other forms of coal. Economically speaking, it cannot be transported long distances and it is primarily suited for consumption at or near the place of extraction. It almost always supplies only the home market, and rarely forms an article of international trade.

This contention was opposed, more especially from the international point of view, by those who advocated the assimilation of lignite mines to other coal mines. They questioned the practical value of a comparison between the European extraction of lignite and the world extraction of coal. It was with the European production of coal, they argued, that the European production of lignite should be compared. As a matter of fact, lignite is virtually confined to the central European countries. In Austria, Germany, Czechoslovakia, Hungary, etc., the output of lignite is very extensive and in some of these countries it is even higher than that of other forms of coal. Thus lignite is a factor of the first importance in central Europe—indeed, an increasing factor, since the lignite industry is making steady progress.

It was further argued that lignite, either in its crude form or as briquettes, gives rise to international trade that is far from negligible in value; and hence has an influence, secondary perhaps, but real, on the coal market. But it is primarily by its consumption on the home market, and by its substitution for anthracite or bituminous coal in boilers, and even in the chemical industry, that lignite has an undeniable effect on the selling price of coal. By setting free a considerable quantity of other coal, which thus becomes available for export, lignite brings pressure to bear on world rates; and it is an indirect but appreciable competitive factor on the world coal market. In addition, since its production is confined to certain countries, these countries, as regards the regulation of hours of work, would be favoured to the detriment of the coal-producing countries that produce no lignite or practically none.

Thus the assimilation of lignite mines to other coal mines for the purpose of international regulation would not only have good effects on the depression in the coal industry, but would also tend to equalise the position on the world market of the various countries exporting anthracite and bituminous coal.

Lastly, the advocates of the exclusion of lignite mines alleged that the charges that would be laid upon the lignite industry by the contemplated system of regulations were likely to endanger its normal

development, and lead to the closing down of certain mines, and even to the stoppage of industries dependent on those mines for their motive power.

The *social arguments* advanced, especially by the advocates of the inclusion of lignite mines in a system of regulations for coal mines, were particularly valuable in that they enabled the question to be brought back into the region that properly belongs to the International Labour Organisation.

In favour of the inclusion of lignite mines in the draft for a Convention, it was argued that the draft took as a criterion the nature of the work itself, and in consequence should cover all underground work whatever the fuel extracted. It would therefore be illogical, it was said, to make distinctions between workers all of whom were employed on underground work and exposed to the same difficulties and dangers. To act otherwise would be contrary to the spirit of humanity and justice by which the regulations are presumably inspired, and would be a departure from the paths laid down in the Charter of the International Labour Organisation.

In support of this argument its upholders referred to national laws, either in force or proposed, on hours of work in mines, which do not distinguish between lignite mines and other coal mines, but apply indiscriminately to all coal mines. In these circumstances how could underground lignite miners who benefit from national laws in favour of miners in general be induced to accept exclusion from International Conventions for the protection of miners?

Against the inclusion of lignite mines it was contended that the number of workers employed in underground lignite mines was very small. It was replied that this was not the case in all the producing countries; furthermore, from the social standpoint it would hardly be justifiable not to apply a Convention to certain workers on the ground that they were a minority. In addition, it was urged that it was of the greatest importance, if proper regard were paid to the interests of the working class, that the largest possible number of workers should be covered by the system of regulations.

Lastly, in these times of economic depression, some countries were afraid that the inclusion of lignite mines might lead to an increase in unemployment, owing to the closing down of mines unable to bear a reduction of working hours and to the stoppage of industries dependent upon them.

To reinforce these economic with *technical arguments*, it was contended that as a result of the methods of working, most of the lignite is extracted at the surface; consequently, if it was accepted that the regulations should apply solely to underground lignite mines, only a small part of the output of lignite would be affected. It was also argued that by reason of its specific qualities lignite cannot be assimilated to the other types of coal; in particular, its calorific value is very much less than that of anthracite or bituminous coal and it often contains a large proportion of impurities.

To this the advocates of the inclusion of lignite mines replied that while in certain countries surface extraction is considerable and even represents a very high percentage of the total amount of lignite extracted, there are just as many countries where all extraction, or at any rate most of it, is carried on underground. Further, the fact that a considerable quantity of lignite is extracted at the surface was for them an argument in favour of regulating hours of work not only in underground mines, but also in open workings. As to the calorific value of lignite, although it is sometimes 2,000 calories or less, it may reach and even exceed 6,000 cal-

ories; in the latter case the difference from bituminous coal is negligible. In addition, the conversion of lignite into briquettes as much as doubles and even trebles its calorific value, besides putting it in a form very suitable for transport. Lastly, even if lignite of low calorific value is to be considered, it will be found that extraction is easy and the output per worker very high. The possible output of a lignite miner in certain mines, reckoned by weight, is said to be six or seven times that of a coal miner proper.

The advocates of the exclusion of lignite argued that the working conditions underground are better in lignite than in other coal mines; the pits are shallower, the workings wider, special systems of ventilation superfluous, the temperature lower, the risks of accident and illness smaller. This contention was disputed as regards all the lignite-producing countries except Germany, on the ground that conditions of extraction vary widely in different countries, and even in different fields of the same country. There are mines in which work is carried on at a depth of 400 metres or more. It was asserted that the conditions of exploitation in underground lignite mines are the same as in other coal mines and the work just as unhealthy and dangerous; according to certain technicians, indeed, the risks due to explosions, dust, and falls of roof are greater in lignite mines.

Finally, both the advocates and the opponents of the exclusion of lignite mines pointed out the difficulties to which the solutions proposed by the other party might give rise. Against inclusion it was recalled that there are mines where fuel is extracted both at the surface and underground, and where there is close connection between the work of the surface miners and that of the underground miners. If the Convention covered lignite mines it would be very difficult to apply it to those where, according to the requirements of the work, a large number of miners might be employed at one time at the surface and at another underground. For inclusion it was maintained that there would sometimes be difficulty in distinguishing clearly between lignite mines and other coal mines. There is not, in fact, one single kind of lignite, but a whole series of kinds, some of which bear a very close resemblance to bituminous coal. It is not easy to give a hard and fast definition of lignite; and in some cases the line of demarcation between lignite and bituminous coal is an arbitrary one.

The arguments brought forward by the respective parties regarding the distinction between lignite and other coal mines did not entirely convince the Conference. In principle it held that all types of coal mine should be covered, but decided that it was impossible to determine for the time being to what extent and by what methods the provisions of the proposed Convention could be applied to underground work in lignite mines. At the same time it requested the Office to carry out a supplementary enquiry into the lignite industry.

The Fourteenth Session of the Conference (1930) had before it the results of this enquiry on the European lignite industry, which were quite sufficient to give an accurate idea of the nature and needs of that industry.

The committee on hours of work in coal mines appointed by the

Fourteenth Session was very divided on the lignite question. The problem, transferred to the economic plane, widened the scope of the discussion. It was no longer a question solely of hours of work in underground lignite mines, but also, for reasons of competition, of hours in open lignite mines, which produce three-quarters of the lignite extracted in Europe and are nearly all situated in Germany. Some Governments insisted firmly on the application of the regulations to the whole lignite industry. Others were no less decided to limit the regulation of hours of work to anthracite and bituminous coal mines, at least for that Session of the Conference. Thus the fate of the Coal Convention was at stake and the possibility of its adoption seriously endangered. So determined were the opposing parties that the committee felt it would not be able to draft regulations for hours of work in lignite mines, whether open or underground, that would be accepted by both. It therefore omitted lignite, provided certain guarantees regarding underground lignite mines—the application to those mines of the Washington Convention in countries ratifying the proposed Coal Convention—and suggested, in a clause added to the Draft Convention and in a separate resolution, that hours of work in all lignite mines should be regulated by a special Convention to be considered by the International Labour Conference in 1931.

The rejection of the Draft Convention prepared by the committee when the final vote was taken, and the decision of the Conference to place the question of hours of work in all coal mines on the agenda of the 1931 Session, raised the problem in more favourable conditions. The interval of a year, in fact, provided the possibility of drafting regulations for hours of work in both kinds of mines at once, and thus of satisfying the advocates of simultaneous regulation in the two branches of the industry as well as those who pressed for a special system for lignite mines.

The Office completed its study of the European lignite industry, and the principal Governments concerned carried on conversations with a view to lessening the differences between them. These related to one question of form and to several questions of substance. The question of form was whether there should be a single Convention for all types of coal, or two Conventions, for lignite and other coal separately. The questions of substance related to the definition of lignite, the regulation of normal hours of work and of overtime in lignite mines as compared with other coal mines, and the distinction, if any, that should be made between underground and open workings.

The Office tried to co-ordinate the views of the different countries, as expressed either in the inter-Governmental conversations or in the replies to the questionnaire. With regard to the question of form, it proposed as a compromise a single Draft Convention containing special provisions applicable to lignite mines on the points of substance indicated above. The course which the Office adopted was determined by the fact that many countries seemed to intend to make the simultaneous regulation of hours in lignite and in other coal mines an absolute condition for their ratification of any Convention on the subject, although this by no means meant that no distinction should be made between the different sorts of mines as regards the rules to be applied in each. Moreover, in the answers to the questionnaire, a majority of Governments had shown themselves in favour of a single Draft Convention covering lignite as well as the other types of coal. Some Governments stated that they could accept two separate Draft Conventions on condition that both were put into force at the same time. In these circumstances the proposals which the Office submitted to the Conference with a view to regulating hours of work in coal mines, including lignite, were made in the form of a single Draft Convention.

The Office's proposals were adopted by the Fifteenth Session of the Conference (1931).

Later, when the reduction of hours of work in coal mines was considered in 1935 and 1936, the question of excluding lignite mines was not brought forward.

2. SCOPE AS REGARDS PERSONS

The delimitation of the scope of the Convention as regards persons was closely examined by the Preparatory Technical Conference.

(a) *Persons covered*

The Conference proposed that the international regulations should apply to any person occupied underground, by whatever employer and on whatever kind of work he may be employed, except persons engaged in supervision or management who do not ordinarily perform manual work. The words "by whatever employer and on whatever kind of work he may be employed" were added to the original Office draft by the Preparatory Technical Conference so as to cover persons employed in mines on such work as sinking shafts or cutting adits, which the mining companies usually hand over to specialised undertakings.

(b) *Persons excluded*

The definition of excepted persons led to prolonged discussion in the Preparatory Technical Conference. In the draft for a Convention submitted to this body, the Office had suggested the exclusion of "persons holding positions of supervision or management other than that of foreman or overseer, and persons employed in a confidential capacity". The reference to persons employed in a confidential capacity was deleted as the majority of delegates considered it too general and therefore likely to lead to difficulties of application. The workers' group would have preferred to except only persons holding positions of management other than that of foreman or overseer, and therefore suggested the deletion also of any reference to supervisory staff in the groups to be excluded. This point of view was not adopted. The exclusion of persons engaged in supervision was approved, but the measure was tempered by providing that the excepted persons must not ordinarily perform manual work. The text thus established by the Preparatory Technical Conference in 1930 was that finally adopted in the Draft Convention.

The application of the Convention to supervisory staff was demanded afresh in 1936 by an adviser to the Polish workers' delegate, who spoke in the committee on hours of work in coal mines. This suggestion received no support, for it was considered preferable not to disturb a text the drafting of which had caused such difficulty in 1930. Moreover, reservations were made on the expediency of the amendment proposed, especially since the supervisory staff plays an important part as regards safety in mines. After a brief discussion the text of the 1931 and 1935 Draft Conventions was retained.

It may also be mentioned, by way of information, that the Draft Convention concerning the reduction of hours of work in the textile industry, adopted by the Conference in 1937, departs from the usual system of the hours of work Conventions as regards the persons excluded from their scope. Instead of formally enumerating such persons, it empowers the competent national authority, which must first consult the organisations of employers and workers concerned, to exempt certain classes of persons from the application of the Convention, including persons who by reason of their special responsibilities are not subjected to the normal rules governing the length of the working week.

§ 2. — Normal Hours of Work

1. ASSIMILATION OF TIME SPENT IN THE MINE TO NORMAL HOURS OF WORK

During its first enquiry on hours of work in coal mines (1925), the Office was faced with the different national methods of calculating these hours and had to find a basis on which the figures compiled from the different data might be compared.

The Office immediately found that the working day of the miner includes a number of factors of widely different character. On reaching the pithead he checks in and is thenceforward at the disposal of the undertaking. He puts on his working clothes, goes to the opening of the shaft, and, after more or less of a wait, enters the cage which takes him down to his work (in some mines the level is reached by an adit). He finally arrives at his workplace either on foot or by some form of mechanical transport. There he makes the necessary preparations and begins to work. His work may be interrupted for meals or rest, or because the material conditions of work, e.g. blasting, waiting for tubs, materials or tools, so require. At a given time he stops work and returns to the surface in the same manner as he left. He may take a bath, dresses, checks out, and ceases to be at the disposal of the undertaking.

The miner's working day therefore comprises:

- (a) a period at the surface at the beginning and end of the day;
- (b) a period underground, made up of: (i) the time needed to go from the surface to the workplace and back, in which time a distinction may be made between the descent, the journey from the shaft bottom to the workplace, the return journey to the shaft, and the ascent; and (ii) a period of work at the workplace interrupted by breaks.

Finally, work in mines is carried out by shifts of workers, and its duration may be calculated for the whole shift or for each worker taken individually.

It follows that the difficulties of determining and comparing the hours of underground workers are due to:

- (a) the several stages in the working day, and
- (b) the fact that hours must often be calculated for a shift and not for a single worker.

Calculations taking these various factors into account give results which differ widely not only from country to country but from coalfield to coalfield and from mine to mine, owing to differences in the equipment of the undertakings, the number of workers in each shift, the distance of the workplace from the shaft, etc.

If therefore hours of work in coal mines were to be compared internationally, the factors that could give the most accurate results had to be defined, in spite of differences of regulation, terminology, custom, method of working, etc. This meant, to begin with, making a definition of the conceptions on which the determination of hours of work would be based.

Three such conceptions could be considered, depending on the unit of place selected for the calculation—the undertaking as a whole, the interior of the mine, and the workplace respectively.

The first conception was that of the *total period spent in the undertaking*, which begins when the worker checks in on entering and ends when he checks out on leaving and is, in fact, the period during which he is at the employer's disposal. This period is important from the social point of view, and is of particular interest to the worker, for it largely determines the amount of his spare time. On the other hand, it is difficult to estimate, and it varies very much from place to place. It may or may not include the time spent by the worker on certain operations before the descent or after the ascent¹, but it will certainly include the time, long or short, he spends in going from the timekeeper's office to the opening of the shaft. There are, in fact, many kinds of special cases, and it may be added that this period is very seldom fixed by the regulations, which as a rule determine only the length of the shift.

The second conception requiring definition was that of the *time spent in the mine*, or in other words, the *length of the shift*, which is the usual measure of the hours of work of underground workers in coal mines. This forms part of the total period spent in the undertaking, and is calculated sometimes for each worker individually, sometimes for the whole shift collectively. In the first case, that of individual calculation, it represents approximately the period spent by the worker underground and therefore corresponds to the period between the time when he leaves the surface

¹ The time spent in changing clothes and bathing varies considerably, and may make an appreciable addition to the length of the shift.

to descend and the time when he returns to the surface at the end of the ascent, i.e. from bank to bank. In the second case, that of collective calculation, the length of the shift is determined in various ways according to the method of allowing for the operations of descent and ascent. It will be shown later that it is possible to express the collective length of shift in terms of the individual shift, and therefore in every case to determine the time spent by the worker in the mine.

This measure of the miner's hours of work is important to him, for it corresponds exactly to his working day as fixed by regulations. This is, in fact, the reason why it can be determined very accurately, for the factors involved are indicated in the regulations.

The third conception is that of the *time spent at the place of work*, which corresponds to the length of the shift less travelling time underground. This period is of importance to the undertaking, as being an essential factor in production. It is closely related to the hours of actual work, especially when regulation breaks are excluded, but does not coincide with them; for it includes the loss of time inherent in the very conditions of working, such as getting ready for work, blasting, waiting for trucks, material, etc., a loss which, besides being very variable, cannot in any case be exactly determined.

To sum up, three methods of calculating hours may be accepted in *theory*: one based on the total period spent in the undertaking, a second on the length of the shift, and a third on the time spent at the workplace. In *practice*, however, the three resulting figures are not of equal importance for purposes of international comparison, nor is it equally easy to determine them with exactitude.

The Office's statistical studies on hours of work related only to two of these factors: the individual time spent in the mine, and the individual time spent at the workplace. But, for the purpose of international regulation, the Office proposed that only the *individual time spent in the mine* should be used, since this can easily be determined and its social importance is incontestable. In the proposed Draft Convention submitted to the Preparatory Technical Conference in 1930, the Office therefore suggested that this should be taken for the definition of the miner's hours of work. The Conference approved the suggestion, and agreed to a limitation of the time spent by the worker in the mine. The principle was not again questioned, and it forms the very foundation of the 1931 and 1935 Conventions.

In this respect the international regulations have fully achieved

their object: the standardisation of the method of calculating hours of work in coal mines. As the late Monsignor Nolens stated at the Preparatory Technical Conference, "the calculation must be uniform, because differences in calculation give a false idea of the actual situation, even to the initiated"; to which Albert Thomas added: "if this were all the Draft Convention were to achieve, if it were merely to establish common standards, I should still consider it had made an advance, because our agreement would make international regulation feasible". This end was reached, and the Draft Conventions of 1931 and 1935 established a common measure for hours of work in coal mines.

2. DEFINITION OF TIME SPENT IN THE MINE

The 1931 and 1935 Conventions define the time spent in the mine as follows: in mines where access is by a shaft, it is the period between the time when the worker enters the cage in order to descend and the time when he leaves the cage after reascending; and in mines where access is by an adit, it is the period between the time when the worker passes through the entrance of the adit and the time of his return to the surface.

3. TIME SPENT IN THE MINE

(a) *Daily Time*

The 1931 and 1935 Conventions fix the daily time to be spent in the mine at 7 hours 45 minutes. This figure was not agreed upon without a long struggle. The miners demanded a 7-hour day; 8 hours corresponded roughly to the actual situation, and the employers would have agreed to it; so that either $7\frac{3}{4}$ or $7\frac{1}{2}$ hours had some chance of obtaining a majority. But the figure of $7\frac{1}{2}$ hours seemed rather remote from existing practice, while that of $7\frac{3}{4}$ hours meant no more than a very small reduction, though one that could be more easily obtained. Hence it was proposed to adopt the latter figure provisionally, while keeping open the possibility of reducing it sooner or later. These proposals were ultimately embodied in the 1931 Convention.

It may be asked whether the figure of $7\frac{3}{4}$ hours represented real progress. All the European laws and regulations then in

operation fixed hours of work at 8 in the day, except the British Act, which provided for a maximum of $7\frac{1}{2}$ hours (collective winding times excluded); but taking the various methods of calculation into account, it was found that the individual time spent in the mine generally lay between $7\frac{1}{2}$ and 8 hours. It seemed at the time, therefore, that application of the Convention would not require any serious change, either in law or in practice.

The $7\frac{3}{4}$ -hour day was only called into question in 1936 because a weekly limit had also to be fixed. The Belgian and Polish Government representatives at this Session of the Conference considered that as part of a general scheme for shorter hours of work, the maximum number of hours in coal mines should be fixed at 40 in the week and 8 in the day, as for other industries, instead of the $38\frac{3}{4}$ hours a week and $7\frac{3}{4}$ hours a day suggested by the Office. But this proposal was defeated by a large majority, the decisive arguments being firstly that the $7\frac{3}{4}$ -hour day was the fruit of a hard-won compromise which it would be unwise to disturb, and secondly that to fix the daily time spent in the mine at 8 hours would be a regrettable step backward as compared with the Conventions of 1931 and 1935.

Since 1936 the situation of fact has clearly moved in the direction of reducing daily hours. Several countries have abandoned the statutory 8-hour day for one of $7\frac{3}{4}$ hours (France), $7\frac{1}{2}$ hours (Belgium and Poland) or 7 hours (time spent at workplace, exclusive of meal times in the United States anthracite mines).

The daily time spent in the mine is however not fully indicative of the actual reduction in the number of hours, unless taken together with the number of days worked per week. Thus a 5-day week is worked in France and the United States and a 6-day week in Belgium and Poland, so that the weekly reduction in hours is after all greater in the former than in the latter countries.

But the number of hours spent daily in the mine may be considered—independently of the corresponding weekly figure—as a maximum of a social character. It would appear that from this point of view the importance of the $7\frac{3}{4}$ -hour day is undiminished, and that such a figure may well be embodied in a Convention providing for a more or less substantial reduction of weekly hours. The social importance attached to it in 1931 as the maximum period to be spent in the mine remains unchanged, and whatever distribution of hours over the week is allowed it seems that the daily limit of $7\frac{3}{4}$ hours should not be exceeded save in cases of authorised exemption.

(b) *Weekly Time*

Weekly hours of work may be limited in two ways—either by directly fixing the number of working hours in the week, or by fixing both the number of working hours in the day and the number of working days in the week.

The 1931 and 1935 Conventions do not lay down a weekly maximum, but as they prohibit the working of mines on Sundays, the practical result is that the weekly time spent in the mine cannot exceed six times the daily limit, or $46\frac{1}{2}$ hours.

When in 1935, and subsequently in 1936, it was proposed to apply the general Forty-Hour-Week Convention of 1935 to coal mines, the question of a maximum for weekly hours of work was discussed and the principle of such a limitation approved. Two figures for the maximum were advanced in the competent committees of the Conference or in the replies of Governments to the questionnaire, namely 40 hours and $38\frac{3}{4}$ hours, the former representing the deduction of one 8-hour shift from a 48-hour week, and the latter {the deduction of one $7\frac{3}{4}$ -hour shift from a $46\frac{1}{2}$ -hour week.

The weekly maximum of $38\frac{3}{4}$ hours corresponded to the desire repeatedly expressed in certain quarters to give the miners shorter hours than those of other industrial workers should the latter be placed on the basis of a 40-hour week.

A majority was in favour of the $38\frac{3}{4}$ -hour week, which, concurrently with the daily figure of $7\frac{3}{4}$ hours, was thereupon embodied in the proposed Draft Convention submitted to the Twenty-third Session of the Conference in 1936. But, as is stated above, this did not obtain the number of votes necessary for adoption.

Lastly, it should be noted that in recent years maximum hours of work in coal mines have been reduced to 35 (at the workplace excluding meal times) in the United States, 38 hours 40 minutes in France, 40 hours in Italy, New Zealand and Spain, and 45 hours in Belgium and Poland. Thus, even among countries where hours have been reduced, there are several which have not yet reached the $38\frac{3}{4}$ -hour week. It may therefore well be asked whether present conditions permit the enforcement of the $38\frac{3}{4}$ -hour week in all coal-producing countries in the immediate future, and whether it would not be advisable to provide a method by which, in each country, the transition from the present scheme to the week of $38\frac{3}{4}$ hours might be facilitated. This question will be examined

more particularly later, and the Office will then have a suggestion to make upon it¹.

Application of the weekly limit

The question of distributing hours over a period of several weeks does not seem of any great interest to the coal industry. As a rule, national schemes limit hours in the mines on the basis either of the day or of the day and week; they provide for the calculation of working time over periods of several weeks only in the case of special groups of workers, such as those engaged in continuous operations. The conditions of work of these groups will be examined later.

In 1935 and 1936 the question of calculating hours over a period of several weeks gave rise to no discussion of any importance. The proposed Draft Convention submitted to the 1936 Session of the Conference merely provided that the competent authorities of each country, after consultation with the organisations concerned, should decide the methods of applying the weekly limit.

During the previous work of the Organisation in this field, only the question of the spread-over had been discussed and examined at any length. It had been proposed that, within the framework of the 1931 Convention (which lays down solely a daily limit of $7\frac{3}{4}$ hours), provision should be made for authority to distribute hours in such a way that a half-holiday might be allowed on Saturday afternoon or a whole holiday once a fortnight. If such a scheme had been enforced, and if the number of hours corresponding to six (or twelve) shifts of $7\frac{3}{4}$ hours had nevertheless been retained in each week (or fortnight), it would have been necessary to exceed the daily limit of $7\frac{3}{4}$ hours.

But, with the $38\frac{3}{4}$ -hour week, a whole holiday can be allowed in each week (and *a fortiori* once a fortnight) without exceeding the daily limit of $7\frac{3}{4}$ hours. Distribution on this basis is, moreover, now practised in the United States under the scheme of 35 hours' weekly work at the face, in France with the week of 38 hours 40 minutes, and in New Zealand with the 40-hour week and 8-hour maximum day.

Therefore, with a shorter working week of $38\frac{3}{4}$ hours and a daily limit of $7\frac{3}{4}$ hours, the question of the spread-over no longer arises at all.

¹ See below, p. 184-186.

4. DETERMINATION OF INDIVIDUAL TIME SPENT IN THE MINE IN CASES OF COLLECTIVE CALCULATION

A study of national laws and regulations shows that the time spent in the mine can be calculated either for each worker (the "individual shift") or for a group of workers (the "collective shift").

Where the individual method of calculation is adopted, the resulting number of hours is exactly the same as the individual time spent in the mine. This is the method used in Austria, the Canadian Province of British Columbia, Italy, New Zealand, Poland, Rumania, Turkey and the U.S.S.R. Sometimes however, as in the German bituminous mines, the individual shift includes the descent but not the ascent, i.e., the end of the working day is the moment at which the worker enters the cage at the bottom of the shaft in order to return to the surface; in this case the time of ascent must be added to find the total time spent in the mine.

But in practice the miner very seldom goes about the mine alone; save in exceptional circumstances he always forms a unit of a group, and hours of work may be determined for the whole group together. In this case, the hours of the group being known, those for each worker have to be determined.

The difficulty is increased by the fact that the various national regulations which are based on a collective calculation of hours of work do not all adopt the same attitude when calculating the length of the shift in relation to the operations of collective descent and ascent. Three methods are employed. Some schemes make the shift begin when the first worker of the group enters the cage to descend and end when the last worker leaves it after the ascent; in this case, the length of the shift includes the descent and ascent of the whole group of workers (two winding times). The second method is to make the shift begin when the first (or last) worker enters the cage to descend and end when the first (or last) re-enters it to ascend; in this case, the length of the shift includes either the collective descent or the collective ascent (one winding time), but not both. Other schemes again make the shift begin when the last descending worker enters the cage and end when the first ascending worker leaves it; the shift thus includes neither the collective descent nor the collective ascent.

For each of these three methods a conversion formula may be established which will give the length of the individual shift, including the times of individual descent and ascent, i.e. the

individual time spent in the mine. For instance, where the collective shift includes the collective descent and ascent, the relation between it and the individual shift may be established as follows.

Two terms must first of all be clearly defined: the time of a collective descent or ascent (one winding time) is the period from the moment when the first worker of the shift enters the cage to descend or ascend until the moment when the last worker of the shift leaves it on completion of the descent or ascent; and the time of an individual descent or ascent is that needed to load and unload the cage once and for its actual descent or ascent. Further, it is assumed that for the ascent the workers are placed in the same order as for the descent. This condition is a most important one, for the time spent in the mine by a worker who went down first and came up last would be longer by almost the whole collective descent and ascent than the time spent in the mine by a worker who went down last and came up first.

To consider for a moment the average worker, i.e. the worker who, during the descent and during the ascent, is exactly in the middle of the group to which he belongs, it is clear that halfway through the collective descent he will, in theory, be at the middle of the shaft. He will, therefore, have left the surface a certain period *after* the beginning of the collective shift, this period being equal to half the time of the collective descent minus half the time of the individual descent (i.e. minus the period from when he enters the cage until when he passes the middle of the shaft).

On the return journey, halfway through the collective ascent this same worker will, in theory, be at the middle of the shaft. He will, therefore, arrive at the surface a certain period *before* the end of the shift, this period being equal to half the time of the collective ascent minus half the time of the individual ascent (i.e. minus the period from when he passes the middle of the shaft until when he leaves the cage).

Thus, the time spent by this worker in the mine is equal to the length of the collective shift after deducting, first, the difference between half the time of the collective descent and half that of the individual descent, and secondly, the difference between half the time of the collective ascent and half that of the individual ascent; that is to say, it is equal to the length of the collective shift minus the difference between the time of a collective journey and the time of an individual journey. In other words, the time spent in the mine is equal to the length of the shift minus the

length of one collective journey (winding time) and plus the length of one individual journey.

This computation may be expressed algebraically as follows. Let P_1 be the length of a shift comprising both descent and ascent, beginning at A o'clock and ending at B o'clock; let T be the time of the collective descent (or ascent), i.e., one winding time; let t be the time of the individual descent (or ascent), i.e., the length of one individual journey; and let X be the individual time spent in the mine (i.e. the length of the shift reduced to an individual basis). We then find:

- (1) At the middle of the collective descent, i.e. at $A + \frac{T}{2}$ o'clock, the average worker will be at the middle of the shaft, and will therefore have entered the cage at $A + \frac{T}{2} - \frac{t}{2}$ o'clock;
- (2) At the middle of the collective ascent, i.e. at $B - \frac{T}{2}$ o'clock, this same worker will be at the middle of the shaft, and will therefore leave the cage at $B - \frac{T}{2} + \frac{t}{2}$ o'clock.

The worker's individual shift X is measured by the time from when he enters the cage, i.e. at $A + \frac{T}{2} - \frac{t}{2}$ o'clock, until when he leaves it, i.e. at $B - \frac{T}{2} + \frac{t}{2}$ o'clock; it is therefore equal to $B - \frac{T}{2} + \frac{t}{2} - (A + \frac{T}{2} - \frac{t}{2})$. Therefore $X = B - \frac{T}{2} + \frac{t}{2} - A - \frac{T}{2} + \frac{t}{2} = B - A - T + t$; but $B - A = P_1$; therefore

$$X = P_1 - T + t.$$

A concrete instance will enable the relation between that form of the collective shift which includes both winding times, and the individual shift, to be better understood. Let us take the case of the first worker who enters the cage to descend; in view of the condition laid down concerning the order of descent and ascent, he must also be the first to leave the cage on reaching the surface; the time he spends in the mine will thus be the same as that of the average worker.

Let us suppose that the number of workers in the shift involves several journeys of the cage for descent and ascent. The length of the collective shift is 8 hours; it begins at 6 a.m. and ends at 2 p.m. The time for the descent or ascent of the whole shift (one winding time) is 30 minutes; the time for the descent or ascent of an individual worker, which is practically the same as that for the group of workers carried in the same cage, is 4 minutes.

The collective descent begins, then, at 6 a.m. and the collective ascent at 1.30 p.m. To allow the last worker to reach the surface at 2 p.m., the first worker must enter the cage at the pit bottom

at 1.30 p.m. He will, therefore, leave the cage at the surface at 1.34 p.m. The length of his individual shift—i.e., the time he has spent in the mine—is thus from 6 a.m. to 1.34 p.m., or 7 hours 34 minutes. We thus have: 7 hours 34 minutes (length of individual shift) = 8 hours (length of collective shift) — 30 minutes (one winding time) + 4 minutes (length of individual ascent).

Therefore, if the collective shift includes both winding times, the length of the individual shift is equal to that of the collective shift, minus the collective descent (or ascent), plus the individual descent (or ascent). This is the method of calculation in Austria, Belgium, Czechoslovakia and Hungary, and in those Yugoslav mines in which the workers travel in cages.

It should be noted that, if the collective calculation relates to a small group of workers who travel together in the same cage, the time of the collective descent (or ascent) is virtually equal to that of the individual descent (or ascent); consequently, the length of the collective shift is the same as that of the individual shift. This method is practised on a wide scale in Belgium, where the regulations permit collective calculation to apply to small groups of workers travelling in the same cage.

A line of reasoning similar to the above enables the following conclusions to be reached:

Where the collective shift comprises only one winding time, the length of the individual shift is equal to that of the collective shift, plus the individual descent (or ascent); this is the case in the Canadian Province of Alberta, France, Japan, the Netherlands, and Spain, and in those Yugoslav mines in which the workers do not travel in cages.

Where the collective shift comprises neither winding time, the length of the individual shift is equal to that of the collective shift plus the collective descent (or ascent) plus the individual descent (or ascent); this is the case in China and Great Britain.

If we return to the algebraic formula established above, and let P1 be the length of the collective shift including both winding times, P2 that of the collective shift including only one winding time, and P3 that of the collective shift including neither winding time, the individual time spent in the mine in each of these cases (X1, X2, X3 respectively) will be as follows:

$$X1 = P1 - T + t$$

$$X2 = P2 + t$$

$$X3 = P3 + T + t$$

If the time of the individual descent or ascent (t), being only a very few minutes, is regarded as negligible, then the length of the collective shift including only one winding time (P2) corresponds to the individual time spent in the mine (X2). This method of calculating the collective shift is therefore equivalent to calculating the individual shift.

Consequently the Preparatory Technical Conference adopted the method of calculation which includes one winding time in the collective shift, and expressed the view that the provisions relating to hours of work would be deemed to be complied with if the period between the time when the first workers of the shift or of any group leave the surface and the time when they return to the surface did not exceed the maximum laid down for the time spent in the mine by any worker. But it specified as a condition that the order of and the time required for the descent and ascent of a shift or of any group of workers should be approximately the same—this in order to avoid the possibility that certain classes of workers might remain underground longer than others belonging to the same shift.

The proposals of the Preparatory Technical Conference were approved at the 1930 and 1931 Sessions of the Conference, and were not called in question in 1935 and 1936 when the Conference discussed the reduction of hours of work in coal mines.

5. DETERMINATION OF INDIVIDUAL TIME SPENT IN THE MINE IN CASES WHERE THE LENGTH OF THE SHIFT IS RECKONED EXCLUSIVE OF WINDING TIME

Great Britain was unable to accept an international scheme based on the method of collective calculation just described. In that country the collective shift includes neither of the winding times; the period defined is that between the moment when the last worker of the shift leaves the surface and the moment at which the first worker returns thither—in other words, the actual time spent in the mine by the complete shift of workers as a unit. The winding time—which may vary from mine to mine—is thus left out of account. This method of calculation, which is based on economic requirements and on a long-standing tradition, secures a uniform working period for all mines. The British Government considered that there would for the moment at least be practical difficulties in the way of amending the law and practice in this respect; it

therefore urged that the international regulations should take account of this special situation.

For the purpose of calculating the individual time spent in the mine, the collective shift in Great Britain must be regarded as composed of two factors: the time spent in the mine by the whole shift together, the only figure fixed by legislation; and the time of the collective descent or ascent (winding time), which is determined separately for each mine.

The individual time spent in the mine, with this method of calculation, equals the length of the collective shift plus one winding time. One of these factors—the length of the collective shift—is stable; the other varies from mine to mine; so that, in this particular case, the time spent by each worker in the mine varies with winding time.

The length of the collective shift is at present fixed in Great Britain at $7\frac{1}{2}$ hours; the individual time spent in the mine will therefore be $7\frac{3}{4}$ hours in mines where the winding time is $\frac{1}{4}$ hour. and 8 hours where it is $\frac{1}{2}$ hour.

For the reasons given, the British Government desired to keep this length for the collective shift, calculated as described above, for all mines, so that they might all be on the same footing as regards the working period of the undertaking. Consequently, for Great Britain, the individual time spent in the mine could only be limited on the basis of an average, which would itself be a function of the average duration of collective winding time. But as the latter average would depend also on its method of calculation, it raised important economic problems. Apprehensions were expressed that under cover of an average the mines working for the export trade would be favoured or that certain classes of workers—such as hewers—whose work is particularly productive, would be kept in the mine longer. This question was discussed at great length, not only at the Preparatory Technical Conference of 1930 but also at the 1930 Session of the International Labour Conference.

Finally a formula was found which, while giving satisfaction to the British Government, included safeguards which the other Governments considered sufficient to prevent their countries from being placed at a disadvantage as regards production.

This formula provided that to determine the individual time spent in the mine where the length of the shift includes neither winding time, the descent or ascent should be calculated according to the weighted average duration of the descent or ascent of all shifts of workers in the whole country; and that in such a case

the length of the shift, i.e. the period between the time when the last worker of the shift leaves the surface and the time when the first worker of the same shift returns to the surface, might not in any mine exceed $7\frac{1}{4}$ hours. As additional safeguards it was provided, first that the average hours of hewers as a class must not exceed those of the other classes of workers in the same shift; and secondly, that if the system were to be changed so as to apply the normal method of calculation laid down in the Convention, the change must be made simultaneously for the whole country and not for any part thereof.

This formula figured in the 1931 and 1935 Conventions, and discussion upon it was not reopened in 1935 and 1936 when the reduction of hours of work in coal mines was under examination.

6. DETERMINATION OF INDIVIDUAL TIME SPENT IN THE MINE WHERE HOURS OF WORK ARE CALCULATED AT THE WORKPLACE

In 1936 a new difficulty arose, because a formula had to be found which would enable the method of calculating hours employed in the United States mines to be adapted to the international method of calculation figuring in the Conventions of 1931 and 1935.

In the United States hours of work relate to individual time spent at the workplace, breaks not included. To obtain from a figure of this sort the individual time spent in the mine, it is necessary to add the travelling time underground (from the shaft to the workplace and back) and the length of the breaks; but these factors—and particularly the travelling time underground—are essentially variable, and for each worker depend on the distance of his workplace from the shaft and the means of transport available. A similar method of calculation is employed in the Canadian Provinces of New Brunswick, Nova Scotia, and Saskatchewan, where hours are calculated as at the workplace itself, and it is being introduced in the U.S.S.R.

There seemed no objection of principle to including in the proposed Draft Convention special provisions adapted to American standards, as had already been done with regard to Great Britain.

In its reply to the questionnaire, the United States Government proposed that in countries where hours of work are usually reckoned as at the face, the time taken by the worker in going to and coming from the face or workplace and in breaks, being excluded, the daily limit should be reduced from $7\frac{3}{4}$ hours to 7 hours and the weekly limit from $38\frac{3}{4}$ hours to 35 hours.

In the letter transmitting its reply to the questionnaire, the United States Government had intimated that the changes suggested were not intended to result in any comparative advantage to the United States. It therefore presumably regarded the proposed difference of 45 minutes in the day and $3\frac{3}{4}$ hours in the week as the equivalent of the unproductive travelling time and breaks which are included in working hours in other countries. The Office nevertheless considered that it would be preferable not to include precise figures in the Draft Convention, but to attempt to establish the requisite equivalence by means of a general formula; it therefore proposed that the limits of time spent in the mine should be deemed to be observed if the sum of the time spent at the face and that spent unproductively in the mine (taken as the weighted average time for the country or district in question) did not exceed the limits laid down for daily or weekly time in the mine.

In the committee on hours of work in coal mines of the Twentieth Session of the Conference (1936), the United States Government representative, while accepting the formula suggested by the Office, proposed that the limits of 7 hours a day and 35 hours a week (exclusive of fixed rest periods) should figure formally in the Draft Convention as maxima for the time spent at the workplace, applicable in those countries which in fact limited such time. This proposal gave rise to a long exchange of views, during which the United States Government representative described the exact intention of his amendment. It appeared from the explanations he gave that in any case the provisions proposed by the Office would always be applied, and that the limits provided for time spent in the mine ($7\frac{3}{4}$ hours per day and $38\frac{3}{4}$ hours per week) would be respected. It was in particular clearly stated:

- (a) that if the hours of unproductive time spent in the mine exceeded or equalled 45 minutes per shift, the limitation imposed by the draft ($7\frac{3}{4}$ hours per day for time spent in the mine) alone would apply. Thus, with an unproductive time of 50 minutes, the authorised hours of work at the face would be $7\frac{3}{4}$ hours, less 50 minutes, equalling 6 hours 55 minutes);
- (b) that if the length of unproductive time was less than 45 minutes per shift, the limitation proposed by the amendment (7 hours per day at the face) would apply. Thus, with an unproductive time of 40 minutes, the authorised

hours of work at the face would not be $7\frac{3}{4}$ hours, less 40 minutes, equalling 7 hours 5 minutes, but 7 hours.

The same reasoning was valid for the weekly limitation.

The proposal was accepted by the committee, and the corresponding text was inserted in the proposed Draft Convention submitted to the plenary session of the Conference.

§ 3. — Making up Lost Time

The question of lost time was raised by the German employers' representative at the Preparatory Technical Conference of 1930, who proposed that

“Hours of work lost on holidays which are not legal public holidays, or on account of extraordinary circumstances, may be made up within a period of two weeks. The prolongation of hours for this purpose may not exceed the duration of one shift per week.”

He pointed out that in Germany, and especially in Prussia, there are certain festivals which are not legal holidays; the workers may take these days off and make up the time later. Moreover, certain shifts are sometimes forced to remain idle as a result of an interruption in the working of the mine; in order not to lose their wages, the workers are permitted to make up the lost time, and they generally prefer to do this by supplementary shifts rather than by working one hour overtime in each shift. The suggestion was rejected by a large majority.

Almost identical proposals were made at the 1930 and 1931 Sessions of the Conference, and were also rejected.

The questions now appears in a new light. If a substantial reduction in hours of work (to $38\frac{3}{4}$ a week) is approved, it may appear necessary also to make sure that the undertaking will be able to use all the hours of work which are thus theoretically at its disposal: in other words, that if in a given week one or more shifts are not worked, they may be made up during the following week or weeks. It is clear that this would be permissible under a scheme for averaging hours over several weeks, if such a scheme were authorised. But if averaging were not authorised or if lost shifts could be made up only by averaging over a longer period than that allowed, it would be necessary to include special provisions enabling the prescribed weekly limit to be exceeded.

In this connection it may be recalled that the French regulations concerning the application of the week of 38 hours 40 minutes for underground work in coal mines provide that collective stoppages due to public holidays, local holidays or accidents may be made up as follows (the same applying also to stoppages for other causes, subject to authorisation by the responsible Government official): a stoppage of one day may be made up during the same or following week; of two days, during the week and two following weeks; of three days, during the week and three following weeks; of four days or more, during the week and five following weeks. Similar provisions apply to surface work.

If the principle of making up lost time is approved, it would be necessary to determine the cases in which it may be applied, the periods within which lost time must be made up, and the maximum extension to be allowed (which, it would appear, should not exceed one shift a week). These points could figure in the international regulations, unless it were specified there that the national authorities might issue the necessary provisions.

§ 4. — Work on Sundays and Public Holidays

At the Preparatory Technical Conference the German Government delegate and the workers' group each put forward an amendment for the inclusion in the Convention of clauses regulating work on Sundays and public holidays in mines; but the Conference had not time to discuss them. The proposed clauses were not included in the draft for a Convention submitted by the Office to the 1930 Session of the International Labour Conference, but the same amendments were put before its committee on hours of work in coal mines. The object of these amendments was clearly set forth by the British workers' representative, who spoke to the following effect:

The working of a mine necessarily calls for certain operations to be carried out on Sundays, but a regular shift should not be worked. What the miners demand, however, is that Sunday work should be controlled, and that certain safeguards should therefore be provided, to prevent abuse and to ensure that only really indispensable and exceptional work is done on Sundays.

After an exchange of views on the subject, the committee adopted a text which was accepted the following year and embodied in the Draft Convention of 1931.

It will be remembered that this provision was revised in 1935,

for, it had been shown that the form given to it had raised difficulties with regard to application in several countries, particularly Belgium, France, and Great Britain.

In this connection it may be mentioned that in its reply to the Office questionnaire in 1931 the Austrian Government observed that the Draft Convention should, like the Austrian legislation, fix the time of the beginning of the Sunday rest (not later than 6 a.m.) and its duration (24 hours). Further, during the discussion in the plenary sitting of the 1930 Session of the Conference, the British employers' delegate had drawn the attention of the Conference to the difficulty which was subsequently raised by the British Government, and he repeated his observations in the following year before the Conference committee on hours of work in coal mines.

In the absence of any indication to the contrary in the Convention, the term "Sunday" had to be interpreted as meaning the period of 24 hours between midnight on Saturday-Sunday and midnight on Sunday-Monday. A similar observation applied to public holidays. But the current practice in the countries referred to above, and no doubt in others too, is for the first Monday shift to begin before midnight on Sunday evening (Great Britain) or for the last Saturday shift to finish on Sunday morning (Belgium and France). This practice does not, however, prevent the workers belonging to these shifts from having an unbroken rest of at least 24 hours, most of which—at least 18—fall on the Sunday.

The 1935 Session of the Conference therefore inserted in the revised Convention of that year a provision under which the requirement relating to the prohibition of work on Sundays and legal public holidays should be deemed to be complied with if workers were given a rest period of 24 consecutive hours, of which at least 18 fell on the Sunday or legal public holiday.

In the committee on the reduction of hours of work in coal mines of the 1936 Session of the Conference, the French employers' representative put the question whether the provisions on Sunday rest really served any purpose in view of the fact that the proposed Draft Convention also provided a maximum limit for weekly hours of work, whereas the Convention of 1931, revised in 1935, was concerned with daily hours only; it seemed to him that the question of weekly rest was sufficiently regulated by the Weekly Rest (Industry) Convention of 1924, which applied to mines. This proposal was opposed by the British and French workers' representatives, who stressed in particular that in the absence of such a

provision it would be possible for certain countries to work their mines on Sundays, which would be contrary to the spirit and the letter of the 1931 and 1935 Conventions. The French employers' representative thereupon withdrew his proposal, and the provisions concerning Sunday work were retained in the proposed Draft Convention.

These provisions prohibited Sunday work in principle, while permitting certain kinds of work, if authorised by national laws or regulations, for persons over 18 years of age only.

The kinds of work in question were:

- (a) work which, owing to its nature, must be carried on continuously;
- (b) work in connection with the ventilation of the mine and the prevention of damage to the ventilation apparatus, safety work, work in connection with first aid in the case of accident and sickness, and the care of animals;
- (c) survey work in so far as it cannot be done on other days without interrupting or disturbing the work of the undertaking;
- (d) urgent work in connection with machinery and other appliances which cannot be carried out during the regular working time of the mine, and in other urgent or exceptional cases which are outside the control of the employer.

It was further provided that the competent authority should take appropriate measures for ensuring that no work was done on Sundays and legal holidays except as authorised; that the work so permitted should be paid for at not less than one and a quarter times the regular rate; and finally that workers engaged to any considerable extent on work permitted as above should be assured either a compensatory rest period or an adequate extra payment in addition to the specified rate of time and a quarter, the detailed application of this last rule being left to national laws or regulations.

It may prove necessary to reconsider the question whether the general prohibition of work on Sundays and legal public holidays, and the rules governing such work as may be authorised on these days, should be retained in the proposed new international regulations in the very probable contingency of their providing for a weekly maximum limit for hours of work.

In this connection it may be pointed out that these provisions are of genuine importance for economic and for social reasons.

From the economic point of view, they ensure equality between all mines as regards the weekly working period of the undertaking; for it would be possible, failing such provisions, to keep work going throughout the seven days of the week by organising a system of rotation of staff without exceeding the weekly maximum number of hours for any worker, or by taking on special shifts for Sunday work. From the social point of view, the proposed provisions guarantee a collective rest on Sunday, and regulate authorised Sunday work much more strictly than does the Weekly Rest Convention of 1924; further, they provide substantial advantages in exchange for Sunday work, whereas the Convention of 1931 only stipulates a compensatory rest period—and even that not in an imperative form. Taken together, these provisions thus supplement the Weekly Rest (Industry) Convention in a satisfactory manner, and secure a higher standard of protection for mine workers.

§ 5. — Shorter Hours of Work at Unhealthy Workplaces

A provision that the competent authority in each country should lay down lower maximum hours for “workers in workplaces which are rendered particularly unhealthy by reason of abnormal conditions of temperature, humidity or other cause” figures in the Conventions of 1931 and 1935. This provision had been inserted by the Office in the proposed Draft Convention which it submitted to the Preparatory Technical Conference in 1930; it was adopted almost without discussion at the 1930 Session of the International Labour Conference, and without any observations at the 1931 Session. There would appear to be no objections to this provision, which figures in most national schemes.

§ 6. — Extension of Normal Hours of Work

The question of extensions of normal hours of work has proved one of the most difficult for reasons of a social, a technical, and an economic nature; for social reasons, because it is important so to limit the extensions that they do not stultify the general provisions limiting the time spent in the mine; for technical reasons, because a thorough examination of the matter revealed delicate problems relating to the performance of certain underground operations which could only be solved on a practical basis after long research

and discussion; and for economic reasons, because it was found that, though extra hours are sometimes necessary to avoid excessive disturbance in the conditions under which undertakings are normally conducted, there is a danger that the system of extensions may be abused and undue influence thus be exerted on competitive power.

For convenience and clarity, extensions of normal hours of work are classified below in three groups: (1) extensions in case of accidents; (2) extensions for technical reasons; and (3) extensions to meet various needs other than the above.

1. EXTENSIONS IN CASE OF ACCIDENTS

The Conventions of 1931 and 1935 provide that, in accordance with regulations issued by the competent authority, the maximum time in the mine may be exceeded "in case of accident actual or threatened, in case of *force majeure*, and in case of urgent work to be done to the machinery, plant or equipment of the mine as a result of a breakdown of such machinery, plant or equipment". The necessity for exceptions of this sort was never disputed. It was made clear, however, by the discussions and by the successive wordings given to the provisions in question, that an authorised exception cannot be claimed for production work proper. This explains why it was found necessary to stipulate that an exception might be allowed even if coal production was thereby incidentally involved—a provision which makes it possible to meet the case where the hewing and removal of a certain quantity of coal is necessary to deal with the immediate effects of an accident or a breakdown.

No maximum limit is fixed for these extensions, but the Conventions stipulate that they shall be allowed only so far as may be necessary to avoid serious interference with the ordinary working of the mine.

Overtime worked in accordance with this provision must be paid for at not less than one-and-a-quarter times the regular rate.

2. EXTENSIONS FOR TECHNICAL REASONS

(a) *Nature and Duration*

The 1931 Convention provided that, under regulations issued by the competent authority, normal hours might be exceeded by half an hour a day "for workers employed on operations which by

their nature must be carried on continuously or on technical work, in so far as their work is necessary for preparing or terminating work in the ordinary way or for a full resumption of work on the next shift, provided, however, that this does not refer to the production or transport of coal". This provision was the result of laborious negotiations between Governments, employers, and workers at the 1930 and 1931 Sessions of the Conference. The discussion turned above all on the classes of workers which might be covered and the duration of the extension. It was found best not to enumerate the classes of workers, but to rely on a general formula covering the operations on which these workers were employed. The duration was finally fixed at half an hour a day.

After the Convention had been adopted, a close examination of the conditions under which it would have to be applied showed that the extra half-hour would not be sufficient for the following classes of workers: underground storemen, enginemen, and drivers of locomotives. Moreover, an extension of normal daily time in the mine appeared necessary for the periodical change-over of shifts in case of necessarily continuous work.

First the British and then the Belgian Government pointed out that the extra half-hour, permitting time spent in the mine to be increased to $8\frac{1}{4}$ hours, would not enable the men attending fans or pumps situated at some distance from the shaft to relieve one another at the actual workplace. The British Government gave an explanation to the following effect:

Three men relieving one another and each remaining $8\frac{1}{4}$ hours in the mine (7 hours 45 minutes plus 30 additional minutes) cannot ensure attendance at a pump or fan which has to be kept working without a break and requires continuous attention, if it is situated 15 minutes' walk from the shaft; for three-quarters of an hour every day the pump or fan would be unattended, unless a fourth man were employed to fill the gap¹.

In fact, a fan or pump cannot be constantly attended by three men relieving one another at the actual place of work, unless this is situated

¹ If the pump or fan, situated 15 minutes from the shaft, is attended by three men, A, B and C, who may not work more than $8\frac{1}{4}$ hours from bank to bank, the following will happen:

Suppose A starts work at midnight; he reaches the fan or pump at 12.15 a.m.; as he must return to the surface at 8.15 a.m. he must leave his place of work at 8 a.m. B, in order to relieve A at the fan or pump at 8 a.m., must go down the pit at 7.45 a.m.; and as he must return to the surface at 4 p.m., he must leave his place of work at 3.45 p.m. C, in order to relieve B at 3.45 p.m., must go down the pit at 3.30 p.m.; and as he must return to the surface at 11.45 p.m. he must leave his place of work at 11.30 p.m.

A, as stated above, did not reach his place of work until 12.15 a.m.; and there is therefore a gap of 45 minutes during which the fan or pump must be left unattended, unless a fourth man is employed to cover the gap.

at the most $7\frac{1}{2}$ minutes' walk from the shaft¹; if the place of work is more than $7\frac{1}{2}$ minutes' walk from the shaft, constant attendance at the pump or fan cannot be obtained by the employment of three men with only the extra half-an-hour allowed by the Convention.

The Belgian Government stated that enquiries in various Belgian coal mines had shown that the daily time spent in the mines by the workers in question might be as much as $8\frac{1}{2}$ hours or even 8 hours 50 minutes.

As regards underground storemen, the Belgian Government informed the Office that in two mines there were respectively 18 and 15 storemen underground and that they were employed daily for $8\frac{3}{4}$ -9 hours; the duty of these storemen was to receive the tools brought back by the workers and check the objects returned or missing, in order to hand over the store to the storeman of the following shift.

The Belgian Government also pointed out that the enginemen and men in charge of internal shafts in which the workers are raised or lowered in cages had to lower the first workers of their shift and raise the last workers of the same shift; the hours of these men often exceeded $8\frac{1}{2}$ hours and were sometimes as much as $9\frac{1}{2}$ hours, the period depending on the distance between the main shafts and the internal shafts and the time required to raise the workers of the shift; moreover, for reasons of safety, it would be impossible for this work to be terminated by supervisors, so as to comply with the terms of the Convention.

The same Government further stated that drivers of locomotives for the transport of workers were in the same situation as the enginemen, etc., mentioned above; moreover, before the transport of workers began, they had to overhaul their engines and do the necessary oiling, and when transport was finished for the day, they had to take their engines back to their places.

Lastly, the Belgian Government pointed out that the provisions of the Convention did not enable the periodical change-over of shifts to take place in the case of men, working on the three-shift

¹ In this case the time-table would be as follows:

A goes down the mine at midnight; he reaches the fan or pump at midnight $7\frac{1}{2}$ minutes, leaves the fan or pump at $8.7\frac{1}{2}$ a.m., and returns to the surface at 8.15 a.m. (Time spent in the mine, 8 hours 15 minutes). B goes down at 8 a.m., reaches the fan or pump at $8.7\frac{1}{2}$ a.m. (the moment when A is leaving it), leaves the fan or pump at $4.7\frac{1}{2}$ p.m., and returns to the surface at 4.15 p.m. (Time spent in the mine, 8 hours 15 minutes.) C goes down the mine at 4 p.m., reaches the fan or pump at $4.7\frac{1}{2}$ p.m. (the moment when B is leaving it), leaves the fan or pump at midnight $7\frac{1}{2}$ minutes—the moment when A arrives. (Time spent in the mine, 8 hours 15 minutes.)

system, in charge of main underground ventilation and pumping machinery which has to be operated continuously for seven days in the week. The following information was provided on the subject:

In Belgium men in charge of underground fans and pumps which have to be kept going continuously on Sundays as well as week-days work in three shifts. Each shift performs an average of 56 hours' work in the week, the average hours of work being calculated over a period of three weeks. It is customary for the shifts to be changed over every week, so that the men are occupied successively for one week on the morning shift, one week on the afternoon shift, and one week on the night shift. The change-over of the shifts is made on Sunday, and is carried out on one of two systems: either one shift remains at work for 16 hours and a second shift works 8 hours¹, or two shifts work successively for 12 hours without interruption². In either case the

¹ NOTE BY THE OFFICE: In this case the time-table might be:

First week:

Monday to Saturday: Shift A works 6 a.m. to 2 p.m.

„ B „ 2 p.m. „ 10 p.m.

„ C „ 10 p.m. „ 6 a.m.

Sunday: Shift A works 6 a.m. to 10 p.m. (16-hour shift)

„ B resumes work at 10 p.m. (24 hours' rest)

„ C „ „ „ 6 a.m. on Monday (24 hours' rest)

Second week:

Monday to Saturday: Shift A works 2 p.m. to 10 p.m.

„ B „ 10 p.m. „ 6 a.m.

„ C „ 6 a.m. „ 2 p.m.

Sunday: Shift A resumes work at 10 p.m. (24 hours' rest)

„ B „ „ 6 a.m. on Monday (24 hours' rest)

„ C works 6 a.m. to 10 p.m. (16-hour shift)

Third week:

Monday to Saturday: Shift A works 10 p.m. to 6 a.m.

„ B „ 6 a.m. „ 2 p.m.

„ C „ 2 p.m. „ 10 p.m.

Sunday: Shift A resumes work at 6 a.m. on Monday (24 hours' rest)

„ B works 6 a.m. to 10 p.m. (16-hour shift)

„ C resumes work at 10 p.m. (24 hours' rest)

² NOTE BY THE OFFICE: In this case the time-table might be:

First week:

Monday to Saturday: Shift A works 6 a.m. to 2 p.m.

„ B „ 2 p.m. „ 10 p.m.

„ C „ 10 p.m. „ 6 a.m.

Sunday: Shift A works 6 a.m. to 6 p.m. (12-hour shift) and resumes work on Monday at 2 p.m. (20 hours' rest)

Shift B works 6 p.m. to 6 a.m. on Monday (12-hour shift), resting from 10 p.m. on Saturday to 6 p.m. on Sunday (20 hours' rest)

Shift C finishes work at 6 a.m. and resumes work at 6 a.m. on Monday (24 hours' rest)

Second week:

Monday to Saturday: Shift A works 2 p.m. to 10 p.m.

„ B „ 10 p.m. „ 6 a.m.

„ C „ 6 a.m. „ 2 p.m.

Sunday: Shift A works 6 p.m. to 6 a.m. on Monday (12-hour shift),

third shift enjoys a rest period of 24 consecutive hours. This arrangement, which is in conformity with Belgian legislation, not only makes it possible to change over the shifts, but also ensures to the men of each shift in each period of three weeks two complete rest periods of 24 hours, or one rest period of 24 hours and two rest periods of 20 hours—the equivalent in either case of two days' rest in three weeks.

To abolish this extension of the working day while still making it possible to change over the shifts once a week, an additional shift would be required on Sunday. The introduction of an extra shift, however, apart from economic considerations, would be undesirable from the point of view of safety, since it would be dangerous to entrust the supervision of pumps and fans to men who were not familiar with them through constant practice. As regards the pump service, it might be possible to increase the power of the pumps and the volume of water with which they can deal, but the financial situation of the mines at present precludes this solution, owing to the expense which it would involve.

The committee set up by the 1935 Session of the Conference unanimously recognised the need for introducing into the Convention such changes as were strictly necessary—but no more—in order that its application should not disturb the present organisation of work in the mines. Nevertheless, differences of opinion arose concerning the length of the extra hours to be permitted. The British Government and British workers' representatives wished to lay down a definite limit for permissible extensions, in order to avoid any possibility of abuse. The Belgian Government representative and the employers' representatives thought that it was not desirable to fix a numerical limit since technical conditions altered from day to day and any limit, however generous, might therefore prove a source of difficulty in a few exceptional

resting from 10 p.m. on Saturday to 6 p.m. on Sunday
(20 hours' rest)

Shift B finishes work at 6 a.m. and resumes work at 6 a.m. on
Monday (24 hours' rest)

Shift C works 6 a.m. to 6 p.m. (12-hour shift) and resumes work
on Monday at 2 p.m. (20 hours' rest)

Third week:

Monday to Saturday: Shift A works 10 p.m. to 6 a.m.

„ B „ 6 a.m. „ 2 p.m.

„ C „ 2 p.m. „ 10 p.m.

Sunday: Shift A finishes work at 6 a.m. and resumes work at 6 a.m.
on Monday (24 hours' rest)

Shift B works 6 a.m. to 6 p.m. (12-hour shift) and resumes work
on Monday at 2 p.m. (20 hours' rest)

Shift C works 6 p.m. to 6 a.m. on Monday (12-hour shift),
resting from 10 p.m. on Saturday to 6 p.m. on Sunday
(20 hours' rest).

Each shift therefore receives $20 + 20 + 24 = 64$ hours' rest period in three weeks. Sixteen of these hours, however, represent the normal interval between shifts, so that the actual rest periods total 48 hours, or the equivalent of two rest periods of 24 hours.

cases; they preferred leaving it to the competent authority to fix the length of the extension in each particular case.

This difference of opinion was discussed in the committee. As at first it proved impossible to find a compromise, the committee voted on two proposals, made by the British Government representative, to the effect that the maximum total time spent in the mine should be $8\frac{3}{4}$ hours for workers engaged on continuous work and $8\frac{1}{2}$ hours for those employed on specified kinds of preparatory or complementary work. These two proposals were rejected and a compromise was reached on provisions which may be summarised as follows:

In the case of workers whose presence is indispensable for ventilation and pumping stations and such compressed-air stations as are necessary for ventilation, in the case of underground storemen, and in the case of winchmen and their indispensable assistants, hours of work may be increased to 8 per day, not including the time spent by such workers in the mine in order to reach their place of work and return from it, it being understood that in each case this time will be reduced to the indispensable minimum. In the case of underground storemen, enginemen, and men in charge of internal shafts, and drivers of locomotives for the transport of workers and the indispensable assistants of the two latter grades, the limit of the extension allowed shall be that fixed by the regulations of the public authority. In the case of workers whose presence is indispensable for the work of underground ventilation, pumping and compressed-air stations, regulations of the public authority may authorise an extension to such an extent as is necessary to permit the periodical change-over of shifts; nevertheless no such worker shall work more than 21 shifts during any period of three weeks.

In the plenary session, the British Government delegate stated that he would have wished the revised Convention to lay down definite limits for the new exceptions allowed.

In 1935 and 1936, when the reduction of hours in coal mines was being examined, the relevant provisions of the revised Convention had to be adjusted and weekly limits to be fixed for the extensions, at least for those in respect of which daily limits had been laid down. The proposed Draft Convention submitted to the Conference in 1936 by the competent committee contained the following provisions:

In the case of workers employed on operations which by their nature must be carried on continuously or on technical work, in so far

as their work is necessary for preparing or terminating work in the ordinary way, or for a full resumption of work on the next shift, the maximum extension was fixed at 2½ hours a week. It was further provided that the hours of workers whose presence is indispensable for the work of ventilation and pumping stations and of such compressed-air stations as are necessary for ventilation, of underground storemen, and of winchmen and locomotive drivers and their indispensable assistants should not exceed 42 in the week, exclusive of the time spent in the mine by these workers in reaching or returning from their place of work, except in cases where the length of the extension has been fixed by regulations issued by the competent authority. Thirdly, in the case of workers whose presence is indispensable for the work of underground ventilation, pumping and compressed-air stations, the extension necessary to permit the periodical change-over of shifts was not to involve weekly hours longer than those fixed for these classes of workers; this provision implicitly permitted calculation on the basis of an average, as is indeed necessary in practice.

(b) Possibility of Other Extensions for Technical Reasons

Although the problem of extensions for technical reasons has been studied in great detail, particularly in 1935 (revision of the 1931 Convention), the opportunity offered by the raising of the present question can hardly be allowed to pass without examining whether the above-mentioned exceptions are sufficient to meet all the technical requirements of the mining industry in every event. Should other exceptions prove necessary, their nature, the conditions to be attached thereto, and the length of the appropriate extension would have to be determined.

(c) Limitation of Number of Workers Affected

At the 1931 Session of the Conference the workers' group proposed that the scope of the exceptions relating to continuous operations and to preparatory and complementary work should be more strictly limited by a provision that the number of workers affected by the exceptions might never exceed five per cent. of the total number of persons employed at the mine (including surface staff, but excluding staff engaged in accessory industrial processes). This was agreed to, and it was further stipulated that such a limit should apply only to mines in normal operation.

(d) *Payment for Overtime Worked for Technical Reasons*

For the same reasons as those indicated in the preceding paragraph, the workers' group also proposed in 1931 that overtime worked in virtue of the exceptions which might be authorised for technical reasons should be paid at not less than one-and-a-quarter times the regular rate. This proposal too was accepted. Nevertheless the Convention of 1935 provides that the extensions necessary to permit the periodical change-over of shifts shall not be deemed to be overtime, so that they need not be paid for as such. As a matter of fact, these extensions are automatically made up for subsequently by means of the rotation of shifts; each body of workers in turn works either a shift of double length or two long shifts, and then in turn either misses a shift or has the benefit of a longer interval before the next.

None of these provisions were called in question when the reduction of hours in coal mines was discussed in 1935 and 1936.

3. OVERTIME FOR VARIOUS REASONS

The Conventions of 1931 and 1935 provide that regulations made by public authority may put not more than 60 hours' overtime in the year at the disposal of undertakings throughout the country as a whole, in addition to the other extensions permitted. This provision is intended to enable any exceptional pressure of work to be met, and its object is thus of an economic nature. It was not included in the first draft submitted by the Office.

Owing to the introduction of several amendments to include an allowance of overtime for economic reasons, the Preparatory Technical Conference discussed the question at length. In view, however, of the uncertainty due to the impossibility of reaching an agreement on the figure for time spent in the mine, a majority in favour of such a provision could not be obtained. But to judge from the discussion, a provision authorising a quota of overtime, to be used at the discretion of undertakings in order to meet economic requirements, had some supporters not only among the employers but also among the Government delegates. The proposed Draft Convention submitted to the 1930 Session of the Conference accordingly provided for an annual quota of 75 hours' overtime, subject to a limit of one hour per day or one shift per week. The Conference committee on hours of work in coal mines rejected this provision, in spite of all the efforts made to find a

compromise. The workers' group, in particular, was unshakable in its opposition to overtime, while the Government delegates were divided on the question. During the discussion in the plenary sitting of the Conference, an amendment submitted by the German Government delegate in favour of a quota of 60 hours' overtime per year to meet extraordinary economic requirements was rejected by a small majority. This vote led to a declaration by the delegate in question that his country could not accept a Convention which completely excluded the possibility of overtime to meet economic requirements, and that he was therefore obliged to refrain from taking part in the final vote on the Draft Convention. This was undoubtedly one of the fundamental reasons why the Draft Convention failed to obtain the two-thirds majority.

Between the 1930 and 1931 Sessions of the Conference conversations took place between the principal European coal-producing countries, with results that were considered by the Office to justify the insertion of a more elastic provision in the draft which it submitted to the 1931 Session. The new wording provided that a quota of 60 hours' overtime in the year might be put at the disposal of undertakings by the public authority. Economic requirements were not mentioned; each country could use the overtime as it wished to meet the special needs of its industry, the competent authority of each State being left free to decide in what cases and in what way the 60 hours might be used. These provisions were adopted without change by the committee and by the Conference, although the committee had first to reject various amendments in favour of increasing the number of hours.

At the suggestion of the workers' group it was decided that the regulations made by the public authority concerning overtime should apply to the country as a whole and should be made after consultation with the organisations of employers and workers concerned. This overtime is to be paid for at not less than one-and-a-quarter times the regular rate, a clause that had been repeated in all the various drafts.

These provisions were retained in full in the proposed Draft Convention submitted to the 1936 Session of the Conference, which failed to obtain the two-thirds majority necessary for adoption.

It must be asked whether the manner in which the problem of overtime was faced in 1931, within the framework of a 46½-hour week, will be satisfactory now that it is proposed to reduce the working week to 38¾ hours. Will an adaptation, involving an increase in the number of additional hours, be necessary? Would

such an amendment be calculated to facilitate adoption of a Draft Convention? Would a larger overtime quota diminish the apprehensions of certain States, which would thus be able, if the difficulties proved too great, to moderate to some extent the effects of a shorter working week? On the other hand, is it not reasonable to fear that too large an overtime quota would render a reduction of hours illusory? These questions are so close to reality that their examination cannot be deliberately avoided.

The problem is in fact that of adapting to present conditions the compromise which was accepted in 1931. Like all those which had preceded it, this compromise was based on mutual concessions. In the same way, perhaps, it will not be impossible to find, between the 60 hours' overtime already accepted and a figure which would stultify any reduction of hours, some intermediary figure—say 80 or a 100—which could obtain a majority.

Moreover, this quota of overtime might be divided into two parts, one—of 60 hours, for instance—being left quite at the employer's disposal, and the other—20 or 40 hours—being made available only on the basis of a collective agreement or a compact between the employers' and workers' organisations concerned, the framing of which would permit the workers to discuss the advisability and necessity of such extensions. The result would be a scheme applying to underground anthracite and bituminous coal mines, similar to that provided for underground lignite mines and for surface mines.

Another possible solution would be to allow a certain quota of overtime—60 or 75 hours, for instance—on a permanent basis, with a second quota which might be made available for a limited number of years only. A safeguard against the abuse of this second quota could be obtained by making its application dependent on the procedure suggested in the preceding paragraph.

Such are the possibilities that might be taken as starting points for an examination of the question of overtime, which has always been one of the principal stumbling blocks in hours of work Conventions.

§ 7. — Regulations for Application made by Competent National Authority

1. CONSULTATION OF EMPLOYERS' AND WORKERS' ORGANISATIONS

An examination of the terms of the 1931 and 1935 Conventions shows that the competent authority is called upon to issue regula-

tions for application of the provisions relating to a special shorter working day in unhealthy workplaces and to the different types of extension of hours.

In accordance with precedent, the two Conventions provide that the employers' and workers' organisations concerned shall be consulted before these regulations are framed.

2. USE OF COLLECTIVE AGREEMENTS

The Government of the United States, in its reply to the questionnaire concerning the reduction of hours in coal mines which was sent out with a view to preparing for the 1936 Session of the Conference, put forward a suggestion with regard to the regulations left to the competent national authority. It proposed that the authority should not intervene to issue regulations on these matters in cases where satisfactory provisions concerning them are made by agreement between employers and workers, subject to the condition that the agreement is made between a majority of the mine workers of the country and employers producing two-thirds of the annual coal tonnage of the country (or, as regards both workers and tonnage, of a particular branch of the industry); if this condition were fulfilled, the agreement would become applicable to the whole country or branch of the industry, as the case might be.

In its report to the Conference, the Office made the following remarks on this subject:

"There is, of course, nothing to prevent any State from giving the force of law to agreements between employers and workers, subject to such conditions as may be thought expedient. But it can hardly be expected that the States Members of the Organisation would be prepared to accept the adoption of this course as an obligation imposed upon them by an international Convention relating to the reduction of hours of work in a particular industry. Account must therefore be taken of two conditions—firstly, that the State may not be disposed to agree to the proposal of the United States Government that agreements should be given the force of law or to agree to the particular conditions suggested for such agreements; and, secondly that the State must be required to carry out the terms of the Convention if no such agreement is reached or if, having been reached, it ceases at any time to operate. Any provision on this matter to be included in the Draft Convention must therefore be permissive, and not mandatory. The Office is not, of course, in a position to forecast what would be the attitude of other Governments to the proposal made by the United States Government, but it has no doubt that they would wish to consider how far the views of the United States Government could be met."

The Office therefore suggested, for inclusion in the proposed Draft Convention, a provision by which, " if the legislation of any Member provides that collective agreements between organisations of employers and workers shall, under prescribed conditions, have the force of law in relation either to the whole of the coal-mining industry or to one or more branches of that industry, the provisions of such agreements shall be deemed to be regulations made in pursuance of (the appropriate Articles of) the Convention ".

This wording was accepted by the committee on the reduction of hours in coal mines, and it figured in the proposed Draft Convention which was adopted by the Conference at the first vote only.

The question deserves special attention, for in 1937 the committees on the reduction of hours in the textile, printing, and chemical industries decided against the application by means of collective agreements or arbitration awards of certain provisions of the proposed international regulations. It was argued in particular that this method of applying the provisions in question would make international supervision difficult or even impossible; that the result would be considerable divergence regarding the application of Conventions both inside any one country and between one country and another; and thirdly that the provisions of collective agreements could if desired be included in regulations issued by the competent authorities.

It is true nevertheless that the proposals made by the Office in 1937 were different from those which it brought forward for coal mines in 1936. According to the drafts submitted in 1937, the competent authority would have been able to dispense with the issue of the detailed regulations provided for in the Convention whenever, in its opinion, collective agreements or arbitration awards satisfactorily and effectively governed the points in question; whereas in the proposed Draft Convention concerning coal mines of 1936, collective agreements might be deemed to constitute the necessary national regulations if they had the force of law either for the whole coal-mining industry or for one or more of its branches. In short, the wording proposed in 1936 gave more valuable guarantees than those contemplated in 1937..

This appears to be the point of view from which the question should be considered.

§ 8. — Annual Reports by Ratifying States

The object of provisions of this sort is to facilitate international supervision of the application of the Convention in countries which.

have ratified it. In conformity with Article 22 of the Constitution of the International Labour Organisation, Governments are required to communicate to the International Labour Office all necessary information as to the action taken to regulate hours of work, as well as information on the regulations issued in application of the Convention and on their enforcement.

§ 9. — Provisions to Facilitate Enforcement

The object of these provisions in the 1931 and 1935 Conventions is to ensure exact application, in each country and in each mine, of the rules laid down in the Convention. They require the mine management to notify by means of notices conspicuously posted at the pithead or in some other suitable place, or by such other method as may be approved by the public authority, the hours at which the workers of each shift or group shall begin to descend and shall have completed the ascent. These hours must be approved by the public authority and be so fixed that the time spent in the mine by each worker does not exceed the limits prescribed by the Convention; when once notified they may not be changed except with the approval of the public authority and by such notice and in such manner as may be approved by it. The employer is also required to keep a record in the form prescribed by national laws or regulations of all additional hours worked under the appropriate Articles of the Convention.

§ 10. — Special Scheme for Underground Lignite Mines

1. NEED FOR A SPECIAL SCHEME

If it is held that the Draft Convention should apply to lignite mines¹, it will have to be decided whether they shall simply fall under the general scheme laid down therein, or shall be governed by special provisions, as is the case under the Conventions of 1931 and 1935.

It has been seen that originally the matter was linked up with the wider problem of including lignite mines in the international regulations. The German Government, which had a particular

¹ See above, p. 129-134.

interest in the question—and had indeed originally raised it— was prepared to accept the principle of a single Convention covering both lignite mines and other coal mines, but only on condition that the regulations took account of the peculiar situation of the German lignite industry, and in particular of the exceptional economic conditions obtaining therein (competition between lignite and other coal mines on the one hand, and between underground lignite and other lignite mines on the other).

The 1930 and 1931 Sessions of the Conference were in favour of including lignite, but recognised the necessity for such special provisions.

In 1936, in the committee on the reduction of hours in coal mines of the Twentieth Session of the Conference, the Polish Government representative stated that it would be advantageous to eliminate the special scheme for underground lignite mines. He observed firstly that such a scheme had only been introduced into the 1931 Convention in order to take account of the German Government's determination not to ratify this Convention unless special arrangements for lignite mines were accepted; and secondly that the arrangements in question were only to last for a limited period. The British and French workers' representatives opposed this proposal; in their opinion it would be preferable to maintain the special scheme for lignite mines, in order not to increase the difficulties in the way of ratification at a later stage. The proposal was then withdrawn and the special scheme for underground lignite mines retained in the proposed Draft Convention, which was submitted to the Conference and adopted by it at the first vote.

2. DEFINITION OF LIGNITE MINES

As soon as it was clear that special provisions for lignite mines were to be included in the Draft Convention, it became necessary to define what was meant by lignite, and to make as clear a distinction as possible between it and the other types of coal.

Such differentiation was found difficult, since certain varieties of lignite closely resemble certain varieties of bituminous coal, and there are lignite mines in which the methods of working are identical with those of other coal mines. Several criteria were proposed to distinguish lignite from other coal mines. Some would have defined lignite mines solely according to the characteristics of the fuel extracted (geological period, calorific value, appearance when scratched, chemical reactions), whilst according to others the

definition would be made both by the characteristics of the fuel and by those of the mine (methods of working, risks, etc.).

Only one of these criteria finally appeared satisfactory—and it had moreover the support of several countries—namely, the geological period. It was agreed that the term “lignite mine” should mean any mine from which coal of a geological period subsequent to the carboniferous was extracted. This simple and easily applicable definition was finally accepted even by the German Government, although it would have preferred a more restrictive definition applying the special scheme only to recent lignites of low calorific value. From a scientific point of view it may be objected that under this definition coal deposits of the Permian period are classified as lignite although they are usually regarded as bituminous coal; but in view of the smallness of these deposits such an objection has no practical significance.

This definition of lignite mines figures in the 1931 and 1935 Conventions.

In 1935 and 1936, when the reduction of hours of work in coal mines was under discussion, the definition was not called in question. But in the competent committee of the 1936 Session of the Conference the United States Government representative, desiring to make it clear that he was in favour of a single hours scheme for all coal mines, including lignite mines, secured the insertion in the proposed Draft Convention of a stipulation that the definition of lignite mines did not apply to the territory of the United States. This was, however, a question of pure form, for since the special scheme laid down for lignite mines is less favourable to the workers than that for other coal mines, any State may apply the more favourable scheme without infringing the Convention.

3. NATURE OF SPECIAL SCHEME FOR LIGNITE MINES

The possible special provisions for lignite mines would relate to two points: the maximum limit for hours of work, and the number of hours of overtime to be placed at the disposal of undertakings.

In 1930 and 1931 the German Government desired not to change the hours of work scheme in force in the German underground lignite mines, where breaks taken by the whole group of workers together are not counted in the length of the shift. This desire was complied with, and it was agreed that the competent authority might permit collective breaks involving a stoppage of production

not to be included in the time spent in the mine, provided such breaks in no case exceeded 30 minutes for each shift; as a safeguard, it was further provided that this permission should only be given after the need for such a system had been established by official investigation in each individual case and after consultation with the representatives of the workers concerned.

As regards the number of hours of overtime, the German Government considered that the quota allotted to anthracite and bituminous coal mines would not be sufficient to meet the needs of the German lignite industry. Thanks to the desire of all parties for an agreement and to concessions made by the workers' group on the one hand and the German Government delegation on the other, the overtime quota was fixed at 150 hours in the year; this was divided into two equal parts, one to be placed unreservedly at the disposal of undertakings by the competent authority, and the other to be available under approved collective agreements "but only in the case of individual districts or mines where it is required on account of special technical or geological conditions".

For the reasons given above, this scheme was retained in the proposed Draft Convention submitted to the 1936 Session of the Conference, which secured a majority at the first vote.

For these same reasons it does not appear advisable to make any changes at the present stage. At the most, supposing the quota of overtime allotted to underground anthracite and bituminous coal mines were greater than that figuring in the Conventions of 1931 and 1935, it might be asked whether a corresponding increase in the overtime quota for underground lignite mines should not also be accorded.

Lastly it may be noted that there was some question in 1930 and 1931 of a special scheme for "mixed" mines (i.e. those comprising both underground and surface workings); but at the proposal of the workers' group, and with the agreement of the German Government, this suggestion was not pressed.

IV. — *SURFACE WORKERS OF UNDERGROUND MINES*

§ 1. — *Extension of Scope of Regulations to these Workers*

In its reply to the Office questionnaire of 1936, the United States Government requested that the scope of the proposed regulations

to reduce hours in coal mines should be extended to include the surface workers of underground mines. As the other Governments gave no information on this subject, the Office could not make a formal proposal and therefore simply submitted, as alternatives, texts appropriate to a Draft Convention in which these workers would be included.

In the committee on the reduction of hours of work in coal mines of the 1936 Session of the Conference, the representative of the United States Government submitted an amendment to include surface workers in the scope of the proposed Draft Convention. Besides stressing the fact that the general practice recognised throughout his country was to include underground and surface workers under the same regulations or the same collective agreements, he pointed out that an important percentage of mine workers were employed at the surface and that it seemed illogical to leave them out of the proposed international regulations. Several members of the Committee replied that never since the question of hours of work in coal mines had been on the agenda of the Conference had there been any question of surface workers, but only of underground workers. The United States Government representative, who was supported by the workers' representative of the same country, then stated that, in consideration of the opinions which had been expressed and in deference to the Governments which had not examined the question of including surface workers, his Government would withdraw its amendment; nevertheless, he wished to specify that this was a matter which ought to be examined by the International Labour Organisation, and that the question of the limitation of hours of work for surface workers should be taken up on a future occasion.

The question is not a new one. At the Preparatory Technical Conference in 1930, the Polish Government delegate asked that the scope of the Draft Convention then proposed should be extended to surface workers. His proposal was rejected, it being argued in particular that as regards conditions of work these persons were in a position similar to that of workers in other industrial establishments; and that they were therefore sufficiently protected by the Washington Hours Convention. No further reference was made to the matter until 1936, and—as stated above—it was then laid aside, provisionally at least.

The question was, it is true, the subject of a special point in the questionnaire sent to Governments with a view to preparing the 1931 Session of the Conference. A large majority of the replies

were against such an extension of the scope of the proposed Convention, and to justify this attitude Governments quoted arguments analogous to those which had been brought forward at the Preparatory Technical Conference of 1930. Consequently the Conventions of 1931 and 1935 apply (as far, as underground mines are concerned) to underground workers only.

Nevertheless, the position with regard to this matter is not now the same as in 1936. In that year the object was to draft regulations industry by industry, and surface workers could not—at that time at least—be covered by any other Convention. This year the question of a general reduction of hours is on the agenda of the Conference, and surface workers may be brought under general regulations on this subject. The only risk is that the Conference might adopt a Convention for industrial workers generally and reject that for coal mines, in which case surface workers would have the benefit of a reduction in hours and underground workers would not. But this paradoxical situation is most unlikely to arise.

It is, however, above all in the light of the facts as presented in the preceding Chapter, that this question should now be studied.

The various national regulations reveal profound differences in the attitude towards surface workers. In some countries all mine workers are subject to the same regulations, whereas in others there are different schemes for persons employed underground and at the surface respectively. These latter countries have increased in number in the last two years, special regulations having been adopted for underground workers while surface workers remain subject to the former schemes (in Belgium and Poland, for instance). Further, legislation in several countries is restricted to underground workers, sometimes together with a few small groups of surface workers whose work is closely connected with that of the underground workers, such as men in charge of machinery for raising coal; this is the case in several Canadian Provinces and in Great Britain, Japan, and the Netherlands. Lastly, in several countries the hours of surface workers are longer than those of underground workers; this applies to Belgium, France, India, Poland, Spain and the U.S.S.R.

In these circumstances the international regulations would very probably have to provide an hours of work scheme for surface workers different from that applying to underground workers; and this scheme would probably be the same as that laid down for industrial workers in general.

Further, the inclusion of surface workers in the scope of a Convention on coal mines might raise difficulties with regard to ratification on the part of countries which have not yet legislated on the hours of these workers.

§ 2. — Definition of Surface Workers

Whatever decision may be taken, it is necessary to define the classes of workers in question and to examine possible hours of work schemes for them.

The expression "surface workers" clearly means the whole staff employed at the pithead at sorting, screening, and washing coal and other operations to which coal is subjected after its extraction, as well as moving, loading, unloading, and weighing coal, etc., until it leaves the pithead. The expression also covers the staff employed in the sundry services belonging to the mine—workshops, power stations, stores, lamp rooms, baths and shower baths, infirmaries, technical and administrative offices, etc.—many of which resemble the general services of other industrial establishments.

But as soon as attention is directed away from underground work, a new question arises, namely, the relation between the mine proper and its ancillary establishments—coke works, briquette works, distilleries, etc.—which are linked to the mining undertaking by economic and legal bonds and form a single unit with it.

It should be pointed out in this connection that the new French Decree which applies the 40-hour week to the surface staffs of coal mines covers workers and salaried employees in the service of coal mining undertakings but not belonging to a mining occupation, if their employment is exclusively concerned with the upkeep and running of the undertaking. On the other hand, industries subsidiary to coal mining are subject to the Decrees covering the industrial groups to which they belong.

In 1936 the United States Government proposed the following definition to cover underground and surface workers together: "Any person . . . employed at any place directly or indirectly in the extraction of coal or its preparation for removal from the mine premises". In its report to the Conference, the Office pointed out that the solution thus proposed might give rise to two difficulties: first, that a general formula would perhaps hardly suffice to distinguish between persons engaged in the preparation of the

coal for removal and those engaged in the actual removal; and second, that it might not always be clear what were to be regarded as the mine premises; “ for example, would the transfer of the coal from the pithead to coking furnaces immediately adjoining be regarded as removal from the mine premises, and would the workers engaged in the transfer be regarded as employed at the mine or at the coke plant ? ”. “ It would seem necessary ”, the report continued, “ to make provision on the usual lines for several such problems of demarcation ”.

The Office accordingly proposed that there should be separate definitions for underground and surface workers, and suggested the following wording for the latter group: “ any person other than an underground worker employed in or about a mine directly or indirectly in the extraction of coal or its preparation for removal from the mine or pithead ”; but that it should be left to the competent authority, after consultation with the organisations of employers and workers concerned, to determine the line separating the surface workers to whom the Convention applied from persons engaged in related operations.

These proposals were not followed up, since surface workers were not included in the proposed Draft Convention submitted to the Conference. Nevertheless, there is matter in these different suggestions of which use might be made if it were decided to define surface workers of underground mines.

Finally, there is the question whether provision should be made for excluding certain classes of workers (and if so, which), the reason being that some persons cannot, by reason of their special duties, be subjected to the normal rules governing hours of work. For underground workers, the proposed exclusion applies to persons holding positions of supervision or management who do not ordinarily perform manual work. If there were objections to a corresponding provision for surface workers, it might be worth considering one on the lines of that adopted in 1937 in the Draft Convention concerning hours of work in the textile industry ¹.

§ 3. — Hours Scheme for Surface Workers

As regards the hours scheme for surface workers of underground mines, two solutions may be contemplated.

The first would consist in placing them under the same scheme

¹ See above, p. 135.

as that applied to industrial workers in general, either by incorporating this scheme in the Convention on coal mines or simply by stating that surface workers of underground mines were subject to the Convention relating to industrial workers in general. For practical reasons, Governments could be consulted by means of the questionnaire drawn up for the latter Convention.

The second solution would be to extend to surface workers the hours scheme for workers in open mines laid down in the proposed Draft Convention of 1936¹. This method, if it proved satisfactory from a technical point of view, would have the advantage of applying the same hours scheme to two groups of workers whose conditions of work do not fundamentally differ.

V. — *WORKERS IN OPEN COAL MINES*

The question of applying international regulations to open coal mines was first raised in connection with lignite.

It had originally been intended to draft a scheme applying only to persons employed underground; but when the question of lignite came up, it was immediately realised that the greater part of the output of this mineral—particularly in Germany, where it is extracted largely from open mines—would be excluded. It is true that the German open lignite mines produce a fuel of mediocre calorific value; but the output of these mines liberates large quantities of better coal for export; and further, in Germany, longer hours are fixed for such workings than for the underground lignite mines.

It was therefore perforce recognised that for economic reasons the fate of the Convention was bound up with the question of regulating hours in open lignite mines. Furthermore, at the request of the French Government, open anthracite and bituminous coal mines were placed on the same footing as open lignite mines.

After much negotiation, the Fifteenth Session of the Conference (1931) reached a compromise regarding the regulation of hours in these mines. The special provisions in question apply only to persons employed directly or indirectly in the extraction of coal, except persons engaged in supervision or management who do not ordinarily perform manual work. It was further agreed that the terms of the Washington Convention should be applied to these workers,

¹ See below, p. 177.

with the proviso that the amount of overtime that may be worked in case of exceptional pressure may not exceed 200 hours in the year, the second 100 hours to be allowed only under approved collective agreements and only where special needs so require.

Changes in this scheme were contemplated in 1936, when the reduction of hours in coal mines was under consideration.

The proposed Draft Convention, which passed the first vote at the Conference, stipulated that the hours of the persons in question should not exceed $38\frac{3}{4}$ per week, but that the competent authority, after consultation with the organisations of employers and workers concerned, might authorise an extension, provided hours of work in no case exceeded 40 per week. This provision was accepted in committee in order to satisfy the representative of the United States Government, who desired that these workers should have the same hours scheme as underground workers, but that it should be possible to increase their weekly hours to 40. It was further provided that the competent authority, after consultation with the organisations of employers and workers concerned, should decide the methods of application.

As regards overtime, the method of regulation proposed in 1936 was the same as that which figures in the Conventions of 1931 and 1935.

The position now appears in rather a different light. As was stated above, the regulation of hours in open mines was justified by economic reasons—namely the need to protect underground coal (including lignite) mines, on the German (home) and on the European market, against the competition of the German open lignite mines, which produce three-quarters of all the lignite extracted in Europe. This result could now be obtained by placing the latter mines under the hours scheme to be prescribed in the proposed regulations for industrial workers generally.

The question resembles that of including surface workers in the Convention on mines; for the conditions of work of persons employed in open mines are roughly the same as those of the surface workers of underground coal mines or quarries, and industrial workers in general.

If the principle of including open mines in the scope of the Coal Mines Convention were accepted, the determination of the workers to be covered would depend on the corresponding decision regarding the surface workers of underground mines.

Thus if the international regulations apply to surface workers of underground mines, it is logical that all workers in open mines

should also be taken into account. In this case a distinction would have to be drawn between the workers in open mines who should be covered and those who might be excluded; the distinction could be the same as that adopted for surface workers of underground mines. As regards their hours of work, open mine workers could be placed either under the scheme for surface workers in general (perhaps with a special quota of overtime), or under that provided for open mine workers employed in the extraction of coal by the proposed Draft Convention of 1936.

If, on the other hand, the international regulations concerning coal mines do not apply to surface workers of underground mines, it follows that, as in the Conventions of 1931 and 1935, only those open mine workers who are engaged in the extraction of coal should be considered; in this case, in order to distinguish between the workers included and those excluded, reference might be made to the method adopted in 1931 and 1935, which is mentioned above. As regards the hours scheme for the workers covered, that contained in the proposed Draft Convention of 1936 would appear satisfactory.

VI. — *SPECIAL SCHEMES FOR CERTAIN COUNTRIES*

It will be remembered that Article 19 of the Constitution of the International Labour Organisation provides (paragraph 3) that:

In framing any Recommendation or Draft Convention of general application the Conference shall have due regard to those countries in which climatic conditions, the imperfect development of industrial organisation, or other special circumstances make the industrial conditions substantially different and shall suggest the modifications, if any, which it considers may be required to meet the case of such countries.

The 1931 and 1935 Conventions contain no provision of this sort. Nevertheless it may be interesting to examine in this regard the work of the Organisation which preceded the adoption of these Conventions.

As soon as the problem of the international regulation of hours of work in coal mines was raised, two currents of opinion made themselves felt, one favourable to a Convention with its scope strictly limited to Europe, the other favourable to a Convention of universal scope.

The advocates of a European Convention pointed out that the question of regulating hours of work in coal mines originated

in specifically European needs, and that regulations to this effect were looked on as part of a series of measures for organising the European coal industry and remedying the effects of the merciless competition between coal producers in Europe. They drew arguments in support of their view from the procedure that had been followed; for in accordance with the suggestion of the Tenth Assembly of the League of Nations (1929), and in view of the Assembly's insistence on the urgency of the proposed measures, only European countries had been invited to attend the Preparatory Technical Conference. It is true that the material in the hands of the delegates, consisting of the reports prepared by the Office on hours of work in coal mines, had covered the principal coal-producing countries; but the data from overseas (for India, Japan, South Africa, Canada, and the United States) had not been in every respect comparable with those obtained for European countries. Thirdly, since the social conditions of workers in certain oversea countries differed rather widely from those in Europe, it might well be asked how far regulations acceptable to the latter would be found suited to the former.

The advocates of a universal Convention, on the contrary, and especially the workers, argued that the regulation of hours of work in coal mines was not solely economic in its aims; it was definitely social, it was an end in itself, and for this reason should be universal. They admitted that the movement in favour of such regulation was European in origin, but they did not draw from this fact the conclusion that the proposed Convention should be confined to Europe; they merely regarded the events that were taking place as a favourable opportunity for achieving a demand of interest to all mine workers. It was also argued that to limit the question to Europe was contrary to the social aim of the International Labour Organisation, namely the improvement of the conditions of the workers in all countries; with this object the Constitution of the Organisation itself (Article 19, paragraph 3) allowed special modifications for countries where special circumstances made the industrial conditions substantially different.

The Preparatory Technical Conference being composed as it was, it discussed hours of work in coal mines as a European problem.

The Governing Body of the International Labour Office, in a resolution adopted after prolonged discussion at its Session in February 1930, invited the International Labour Conference to take into special consideration the fact that the question had been raised entirely as a European one, and informed it that complete

information on hours of work in oversea coal mines would not be available.

The 1930 Session of the Conference made no explicit declaration concerning the nature of the Convention in this regard. But several Government representatives of oversea coal-producing countries spoke on the subject in plenary sitting.

The South African Government Delegate declared that, the object of the Draft Convention being to regulate hours of work in European coal mines and South Africa having been excluded from the investigations and consultations which had led up to it, his Government could hardly be expected to vote for the Draft Convention: on the other hand, in view of the importance of the Convention to the European countries concerned, the Government would not vote against it. Other Government Delegates (India, Chile, Australia and Canada), while recognising that the Draft Convention had been framed with reference to Europe and that their Governments had taken no part in its preparation, declared that they would vote in favour of it—the Indian Government Delegate in order to help the European countries to secure an international understanding in the matter, but without prejudice to the attitude of his Government on the question of ratification; the Chilean and Australian Government Delegates in order to help to improve the European miners' conditions; and the Canadian Government Delegate because such a regional Convention could not be adopted through the machinery of the Conference if non-European countries abstained from voting on it. The Australian Government Delegate protested against any suggestion that non-European countries should not participate in the vote, as contrary to the fundamental principles of the Organisation; he pointed to the interest which non-European countries, whether coal-producing or not, had in improving and stabilising conditions in the European industry and so facilitating stabilisation in all countries, and emphasised the social object of the Convention as against the economic arguments advanced on the other side.

As has been stated, this Session of the Conference did not adopt the proposed Draft Convention, but decided at once to place the question on the agenda of the next Session. During the discussion which led up to this decision, the Danish Employers' Delegate observed that if the Conference placed the question on the 1931 agenda, it would be a new question which would concern all the Members of the Organisation and not only a few countries. It may nevertheless be pointed out, as the Office did in its report to the

1931 Session of the Conference, that the 1930 Session had given a universal character to its proposed Draft Convention, in spite of the Article providing that the Convention should only come into force after ratification by a specified number of European countries. The Office continued as follows:

" Since then the International Labour Office has complied with this indication of the Conference in the consultation of Governments. The Questionnaire was despatched to all the countries in the Organisation, and the replies of countries in Europe or overseas are being treated on the same footing. All the same, it is clear from certain observations made in the Governing Body and at last year's Session of the Conference that a number of oversea Governments tend to regard a Convention on hours of work in coal mines as not being framed for them. They may be prepared perhaps to approve its terms in a humanitarian spirit, but they hardly think of applying its rules to the mines in their countries. Perhaps, too, the countries directly interested and which would be covered by the regulations to be framed by the Conference may feel that this kind of abstention on the part of oversea countries creates an inequitable situation. The fact is that it may perhaps be necessary, as was done for certain countries in the Washington Convention, to provide explicitly either that specified countries, in view of their special conditions, are exempt for the time being from the regulations to be laid down, or that certain reforms of a really humanitarian character and inspired by Part XIII of the Treaty would, though not directly bearing on the regulation of hours of work, constitute a form of progress equivalent to that contemplated by the more important coal-producing countries. If, for example, the reduction in hours of work which was to become the general rule for the important producing countries were accompanied by an Article in the Convention by which certain countries agreed to limit to some extent the work of their miners or to abolish underground work for women, this would be completely in harmony with the spirit of an all-round and duly balanced regulation of the problem, which is the spirit of the Washington Convention.

" These indications are given simply to show clearly what the nature of the problem is. Provisionally and in the light of the Governments' replies the Office can only deal with it by giving to its proposals a general scope, in the hope that during the discussions at the Conference itself the countries concerned may of their own motion offer or may be invited to define by special Articles their particular position with regard to the rules to be proposed."

No proposal was made concerning special schemes at the 1931 Session, but the Conference proclaimed the principle that the Convention should be universal. It rejected, by 89 votes to 14, an amendment by the South African employers' delegate, supported by the Australian employers' delegate and the Canadian Government delegate, to add the following words to the Draft: " The provisions of this Convention shall not necessarily apply to non-European countries, but the question of limiting hours of work in the coal mines of those countries shall be considered at an early session of the Conference ".

The present situation is different from that of 1930 and 1931 in that the United States, a non-European country and at the same time the greatest coal producer in the world, is now a Member of the Organisation. Moreover the information submitted to the Conference now covers every country with any considerable output of coal.

But the question of the special schemes contemplated under Article 19, section 3, of the Constitution, which the Office called to mind in 1931, is clearly still open. It may be noted that the position with regard to hours of work in certain countries is peculiar.

In China, the working day is fixed by legislation at 8 hours. In practice, work at the surface often lasts for 9 hours and sometimes for 10 or 12 a day; for underground work the commonest daily figure appears to be 8 hours, as a rule excluding both winding times; but in some mines the time spent in the mine reaches 12 hours. In practice, again, few mines have adopted the system of a weekly rest.

In India, hours of work in mines are fixed by legislation at 54 a week (underground and surface), with a daily limit of 9 hours underground and 10 hours at the surface. But according to the Indian Government, hours of presence in the mine for underground workers and actual hours of work for surface workers are about 8 a day and 48 a week.

In Japan, the legal maximum for work in coal mines (underground) is 10 hours a day. In practice this includes a break of about an hour. As a rule there are two rest days a month. At the surface, actual working time was, in 1935, 10 hours 20 minutes a day and 64 hours 20 minutes a week.

In Chile, according to information given by the Government of that country in its reply to the questionnaire (preparation of the 1936 Session of the Conference), 90 per cent. of the coal extracted comes from deposits situated below the sea. The adits to these workings are several kilometres long, so that the transport of workers requires a fairly considerable time, estimated at 2 hours, going and coming. At present this travelling time is not included in hours of work, which are fixed at 8 in the day. In these circumstances, stated the Chilean Government, a reduction in the time spent in the mine would seriously affect all the national industries dependent on the extraction of fuel from these submarine deposits of coal.

In the Union of South Africa, according to information supplied by the Government, the provisions concerning hours of work

in the mining industry do not apply to coal mines. About 95 per cent. of the labour in these mines consists of coloured workers, who are employed on a task basis. No account is taken of hours worked; workers who finish their task before the end of the shift are brought to the surface as soon as circumstances permit, and in mines which can be entered by an adit they return to the surface on foot. All the coloured labourers are housed and fed by the employer; they have generally not yet attained the average standard of civilisation of the European population.

In order that these special circumstances may be taken into account, the Office has certain suggestions to make. For the three Asiatic countries mentioned above, during a transitional period, the length of which would have to be determined, hours of work might be fixed at 8 in the day and 48 in the week, or, particularly for underground work, at $7\frac{3}{4}$ and $46\frac{1}{2}$ hours respectively as being more in conformity with the principles of the Convention. For Chile, as regards submarine deposits, the Conference might consider the possibility of not taking account of travelling time underground, or at least that part of it which exceeds a limit corresponding to the average travelling time underground in European mines.

On the other hand, failing sufficient information on the position in the Union of South Africa, the Office is not in a position to make suggestions concerning the details of a special scheme such as might suit the exceptional conditions of employment of coal-mine workers in that country.

In order to facilitate agreement it might be made a condition for the approval of these special schemes that the question should be brought up for review after a specified period; all that would be needed would be to extend to these provisions the possibility of revision under the procedure proposed later ¹.

VII. — SAFEGUARDING CLAUSE

The safeguarding clause which figures in the Conventions of 1931 and 1935 was introduced in the former year, at the request of the workers' group, in connection with the special provisions concerning lignite mines. The workers' group and even certain Governments considered it necessary to provide safeguards to prevent the Convention from being used to diminish the protection already

¹ See below, p. 190-192.

enjoyed by workers; indeed, the workers' delegates of certain countries made this an express condition of their vote in favour of the Draft Convention. This was the reason for the insertion of a clause reproducing the general principle of Article 19, paragraph 11, of the Constitution of the International Labour Organisation, which stipulates that in no case may any Member be asked or required, as a result of the adoption of any Draft Convention by the Conference, to lessen the protection afforded by its existing legislation to the workers concerned.

In the proposed Draft Convention of 1936, this provision was extended to cover any award, custom or agreement which might ensure more favourable conditions than those provided by the Convention.

VIII. — *SUSPENSION OF APPLICATION OF THE INTERNATIONAL REGULATIONS*

An article concerning suspension of the operation of the Convention in the event of emergency endangering the national safety figured in the draft submitted by the Office to the Preparatory Technical Conference in 1930. This formula was considered wide enough to cover also cases of national economic emergency. The proposals of the workers' group to delete this provision, made in the committees on hours of work in coal mines of the 1930 and 1931 Sessions of the Conference, were rejected. The clause gave rise to no remark in 1935 and 1936.

IX. — *GRADUAL APPLICATION OF THE REGULATIONS*

The establishment of a $38\frac{3}{4}$ -hour week in coal mines might be facilitated by providing for its gradual introduction where an immediate application in full would meet with serious difficulties. Instead, therefore, of introducing the shorter working week in all coal mines at a stroke, a number of stages could be permitted, applying either to the hours of work themselves or to the different mines or mining districts: i.e., on the one hand, hours might be reduced by degrees; and on the other, certain mines or mining districts might be brought under the scheme only after the expiry of specified periods.

Such an arrangement might be justified by the difficulties of

rapidly adjusting the industry to the new scheme—difficulties due either to the consequent danger to the economic situation of the mines, or to the shortage of labour. It would permit the period of adjustment to be extended and the full enforcement of a $38\frac{3}{4}$ -hour week to be achieved without too great a shock.

Again, the regulations might make such facilities general or leave it to the discretion of the competent authority to act in accordance with circumstances.

The duration of such a transitional scheme would be limited, and once the period laid down in the international regulations had expired the $38\frac{3}{4}$ -hour week would have to be generally and fully applied.

This method has been used in Belgium. The present working week of 45 hours for underground work in coal mines is applied in virtue of the Act of 1936, which provides for a gradual reduction of hours of work to 40 in the week in unhealthy, dangerous or exhausting occupations.

Lastly, it should be mentioned that the Draft Convention concerning the reduction of hours in the textile industry, which was adopted by the Twenty-third Session of the International Labour Conference in 1937, provides for a system of gradual application covering a period of two years from the coming into force of the Convention.

The position in regard to hours of work under several national schemes has been described above¹. In the international field there are the Draft Conventions of 1931 and 1935, the provisions of which amount in practice to a working week of $46\frac{1}{2}$ hours, and the proposed Draft Convention of 1936 (not adopted by the Conference), which is based on a working week of $38\frac{3}{4}$ hours, i.e. an adaptation of the 40-hour week to the coal-mining industry.

It is between these two limits that a figure acceptable to the parties concerned might be found. The necessary compromise will probably have to be based on a daily time spent in the mine fixed at $7\frac{3}{4}$ hours, for—as has already been stated—to call this daily limit in question would be to encounter invincible opposition. A weekly limit of 40 hours, which is logically linked up with the 8-hour day and which had only a very small number of supporters in the competent committee of the Conference in 1936, would thus be out of the question.

To reduce hours from $46\frac{1}{2}$ to $38\frac{3}{4}$ is equivalent to deducting

¹ See pp. 140-142.

one shift of $7\frac{3}{4}$ hours in each week. As every compromise is based on mutual concessions, those delegates to the Conference who in 1931 implicitly accepted the $46\frac{1}{2}$ -hour week and those who in 1936 supported a $38\frac{3}{4}$ -hour week might therefore perhaps be asked to meet each other halfway. Such an attitude might be expressed by agreeing to the deduction, from the 1931 limit, of one $7\frac{3}{4}$ -hour shift in each fortnight, i.e. by accepting an average of $5\frac{1}{2}$ such shifts a week. Instead of 12 shifts of $7\frac{3}{4}$ hours (93 hours in all) per fortnight, with six shifts in each week, the mines in question might work 11 such shifts ($85\frac{1}{4}$ hours in all) per fortnight, with six shifts ($46\frac{1}{2}$ hours) one week and five shifts ($38\frac{3}{4}$ hours) the next.

This scheme would necessitate the spread-over method of calculation, i.e. the distribution of hours over the fortnight, which is already in force with different daily limits in several districts of Great Britain, as well as in the Australian States of New South Wales and Western Australia.

An agreed scheme of this sort might be introduced for two, three or four years as a transitional arrangement, to which the competent authority of each country could have recourse, for all its mines or for certain of them, if it was considered that the immediate application of the $38\frac{3}{4}$ -hour week would endanger the position of the coal industry in that country or in certain districts.

X. — *COMING INTO FORCE AND DURATION OF THE CONVENTION*

By reason of the economic and, it may be added, specifically European motives behind the Draft Convention adopted in 1931, its coming into force was made dependent on its ratification by two of the following countries: Belgium, Czechoslovakia, France, Germany, Great Britain, Netherlands, Poland. This solution was reached after much discussion, which is summarised above and which related to the essential character of the Convention—namely, whether it was to be a European or a general measure. (See pp. 178 et seq.)

In its report to the 1930 Session of the Conference the Office said in this connection:

“ Rapid solutions must be adopted, as was requested by the Thirteenth Assembly of the League of Nations. The Convention cannot take effect until it is applied at least by the European countries concerned, and none of these countries would wish to ratify the Convention until the others do likewise.

"In order to harmonise these points of view and avoid conditional ratifications, the Office endeavoured to find means of putting the Convention into force simultaneously in all the countries directly concerned, that is, in all the European countries convened to the Preparatory Technical Conference, or at least in the four or five most important ones. This can be achieved simply by stating that the Convention will not come into force until ratified by these States."

The Office therefore suggested the following text:

"This Convention shall come into force on the date on which the ratifications of the following members of the International Labour Organisation have been registered by the Secretary-General: . . ."

The names of the countries to be mentioned were thus left blank. In the Committee on hours of work in coal mines of the 1930 Session of the Conference, the British Government representative proposed that the countries should be the following: Belgium, Czechoslovakia, France, Germany, Great Britain, Netherlands, Poland. This proposal was adopted. But, as will be remembered, it was found impossible to settle the question of hours of work in coal mines in 1930, and the question was placed on the agenda for the 1931 Session of the Conference.

In the questionnaire sent to Governments with a view to preparing this Session, the Office, having called to mind the proposal adopted by the Committee in 1930, added:

"It is easy to understand the economic considerations which can be urged in favour of such a procedure. It should not be overlooked, however, that the regulations contemplated have a definitely social character, and from this standpoint, which must clearly be the standpoint of the Office, it may be questioned whether progress in the protection of the workers might not be impeded by a provision of the nature referred to above, which might possibly hold up the coming into force of the Convention. Would it not perhaps be preferable to keep to the provisions usually included in the Conventions? The regulations might then come into force more rapidly, and the workers in ratifying countries might thus have the benefit of the Convention more quickly."

The questionnaire thus gave Governments an opportunity to reconsider this important question, and requested them to state whether the coming into force of the regulations should be subjected to certain special conditions, and if so, what conditions.

The replies of Governments on this point were somewhat divergent; but the Office found the elements of a compromise in the French Government's reply, namely that the Convention should come into force as soon as its ratification by two of the countries mentioned had been registered. This middle course was accepted, though not without discussion, at the 1931 Session of the

Conference, and the provision figures in Article 18 of the Draft Conventions of 1931 and 1935.

In 1936, when the reduction of hours in coal mines was under discussion, the question was raised afresh in the competent committee. The draft submitted by the Office in its report contained no special provision relating to the coming into force of the Convention; but the Polish Government delegate proposed an amendment to reintroduce the principle of Article 18 of the 1931 and 1935 Conventions—i.e. to make the coming into force of the Convention dependent on ratification by two Members from among the largest European coal-producing countries. However, no enumeration of these countries was given.

During the long discussion which this proposal caused, it was stated in particular that a State's non-membership of the International Labour Organisation need not prevent it from being a party to an international agreement concerning conditions of employment, for this result could be achieved by means of bilateral treaties.

Finally, the committee returned to the text of Article 18 of the previous Conventions, replaced "member" by "State", and added the U.S.S.R. to the list of seven European countries already mentioned. But, as will be remembered, the proposed Draft Convention which this committee submitted to the plenary sitting of the Conference was rejected at the final vote.

Moreover, this question cannot be re-examined unless account is taken of the reservations, relating to the ratification of the 1931 and 1935 Conventions, made by most of the countries mentioned in Article 18 of these instruments. Repeatedly, at the Conference or in other meetings, representatives of these countries have declared that their Governments were prepared to ratify only if the other States mentioned in that Article also ratified at the same time. Thus it is that since 1931 a solution has been required for the question of simultaneous ratification by a number of European countries, first of the 1931, and then of the 1935, Convention.

It would seem that, unless some new solution can be found for this problem of simultaneous ratification, the ratification of any new Convention relating to hours of work in coal mines which may be adopted by the Conference will encounter, and perhaps be prevented by, precisely the same difficulty which has been mainly responsible for holding up progress since 1931. It therefore appears to be essential to find some new solution for this problem, and after much consideration the Office has reached the conclusion that it

ought to suggest to the Conference a proposal designed to afford an avenue of escape from the simultaneous ratification impasse. Unless some more suitable proposal is made by the Conference, there would seem to be a very strong case for attempting to overcome the difficulty which has hitherto blocked all progress in the following way:

Unwillingness to apply the standard set by a Convention unless other States are also applying that standard is not the only ground upon which a State may be unwilling to ratify a Convention unless other States ratify the Convention simultaneously. Unwillingness to bind itself internationally to continue to apply the Convention standard over a considerable period unless other States bind themselves simultaneously for the same period may, and often does, play a still more important part in determining the decision of a State which is considering ratification. It would seem possible to meet the views of such States by providing in the Convention that until it has been ratified by certain named States, any party to the Convention may denounce it at any time on giving one month's notice. Apart from a clause to this effect, the Convention would contain provisions of the ordinary type relating to coming into force and denunciation. It might, for instance, come into force six months after the registration of any two ratifications, and be subject to denunciation, after all the named States had ratified, at five-yearly intervals.

Briefly put, the Convention would operate as a *modus vivendi* subject to denunciation at any time on one month's notice, until it had been ratified by those States whose simultaneous ratification would probably be insisted upon as a condition of undertaking an engagement valid for five years; but on ratification by the enumerated States, the engagement entered into by all States which had ratified would lose its provisional character and become a firm engagement effective for a period of five years, and thereafter for further periods of five years unless denounced. The Convention would enter into force and require, in the case of States which had ratified, observance of the standards prescribed by its terms, six months after the deposit of the second ratification; but until potential competitors of special importance, named in the Convention, had ratified, any party to the Convention would be entitled to withdraw from its engagement on giving a short period of notice if it felt that the competition of such States made it impossible for it to maintain standards not being observed elsewhere. Provision could be made, if thought desirable, for consider-

ation of the whole position by the Governing Body in the event of any State having recourse to the provision permitting denunciation at one month's notice. On some such lines as these, it would seem possible to overcome the main difficulty which has hitherto prevented the coming into force of any Convention relating to hours of work in coal mines.

It should be clearly understood of course that a provision of this kind would be of an altogether exceptional character, would be included in the Convention only on account of the proved difficulty of bringing such a Convention into force, and would not be a precedent in the case of any Convention in respect of which difficulties of this order do not exist.

XI. — *REVISION OF THE CONVENTION*

The Conventions of 1931 and 1935 are built up on a series of compromises—one concerning the maximum limit for daily time spent in the mine, a second relating to the special method of calculation authorised for Great Britain, and others to the special provisions for underground lignite mines and for open workings. Agreement on these points was only reached on condition that the relevant clauses were no more than provisional and could be revised at not too distant a date, for which purpose Article 21 of the 1931 and 1935 Conventions states that at the latest within three years from their coming into force, the Governing Body of the International Labour Office shall place on the agenda of the Conference the question of the revision of the Convention on the points in question.

As has already been repeatedly pointed out, the regulations now proposed must be regarded in a different light.

As regards the time spent in the mine, the fixing of a weekly limit would make the daily limit somewhat less important. The latter would then be only one of the factors of limitation, whereas in the 1931 and 1935 Conventions it is the only such factor. Whether the question of revision arises will depend on the decision reached with regard to weekly hours: if the limit fixed does not appear satisfactory to all the parties, it will be possible to provide that this limit shall be re-examined later. But this question is bound up with that of the gradual application of the Convention; for the revision procedure might well be useless if a scheme for gradual application were to be adopted.

An identical remark may be made as regards the number of hours' overtime. The Convention might fix either a single overtime quota to be subject to revision procedure, or it might fix a permanent quota, together with a second temporary quota to be used during a specified period only.

The method of calculation authorised for Great Britain constitutes an exception under the 1931 and 1935 Conventions, and as such it at one stage seemed necessary to consider its deletion. But the new regulations will have to take account of the method of calculation in use in the United States and several Canadian Provinces—which seems also to be in course of adoption in the U.S.S.R. Should the provision relating to it be given a transitional character, or regarded as permanent? In these circumstances, the nature of the two exceptional methods of calculation will no doubt have to be re-examined, and the persons most directly concerned in the question—the miners—are certainly not indifferent to it.

Further, the agreed formulæ concerning underground lignite mines and all open coal mines, and more particularly concerning the special quotas of overtime allowed to these two classes of mine, will have to be re-examined in view of the shorter working week; it must be asked whether the amount of such overtime, which certain members of the Committee considered too great in 1931 with a 46½-hour week, should be given a provisional or a permanent character with a week of 38¾ hours.

Lastly, it may be pointed out that in 1936 the question of revision was not considered by the Office, and that no remark was made on the subject.

It should also be noted that a Convention can be revised at any time in accordance with the regular procedure for which the Standing Orders provide. Since 1931, seven Conventions have been so revised, including also that of 1931 limiting hours of work in coal mines.

All these points will have to be taken into account in reconsidering the principle of including in the Convention a special clause as to the possibility of revision before the expiry of the usual period fixed for the submission to the Governing Body of the periodical reports concerning the application of the Convention. If the principle is again accepted, it would appear advisable to determine the conditions in which the revision procedure might be opened, the time-limit for opening the procedure, and the provisions which should be subject to revision.

As a basis for discussion, the Office suggests that the Conference

might request the Governing Body to consider, on the expiry of a period of 2-4 years from the coming into force of the Convention, the desirability of revising the provisions of the Convention concerning the maximum limits for hours of work in the different classes of mines, exceptional methods of calculating hours of work, the number of hours' overtime allowed for the different classes of mines, and the special schemes.

C

CONSULTATION OF GOVERNMENTS

The preceding pages contain an analysis of the points with which international regulations to reduce hours of work in coal mines must deal. Very few of the problems raised are new; indeed most of them—one might say nearly all—have been studied during the last 13 years, some of them several times and in circumstances that have changed with the development of the situation internationally and within the different national systems.

A fair number of these problems have been settled in a manner which for the moment appears final. Others have been settled provisionally on the basis of agreed solutions for which the Conventions of 1931 and 1935 themselves stipulated re-examination at a later stage. In the case of others, the method of settlement adopted has not given full satisfaction to some of the parties concerned—Governments, employers, and workers—and several of these points are likely, when the time comes, to cause new and no doubt fierce controversy. Again, certain problems which have been left in suspense may now require solution. Lastly, the methods of settlement adopted on the basis of daily limitation will have to be re-examined and supplemented for the purpose of weekly limitation combined with a reduction in hours.

The question must therefore be taken as a whole, so that the Conference may study it from every point of view. Nevertheless, as regards points on which the previous sessions or tripartite meetings reached generally accepted solutions, only these solutions have been presented. On the other hand, as regards points on which general agreement seems less certain, or which had been left in suspense, or which now come up for the first time, the Office has presented not one possible method of solution but, where

appropriate, several possibilities, so that the Conference can examine them all.

In any case reference has been made to those solutions which are embodied in the Conventions of 1931 and 1935 or in the proposed Draft Convention submitted to the Conference by its competent committee in 1936. Moreover, the texts of the revised Draft Convention of 1935 and the proposed Draft Convention of 1936 are reproduced in an appendix.

Further, it should be pointed out that the question of reducing hours of work in coal mines is to be placed, at no more than a month's interval, before two organs of the International Labour Organisation—the Tripartite Technical Meeting and the Conference. These two bodies will have to deal with the same questions; but the Tripartite Technical Meeting, which will sit first, is of a specially technical character and its powers are advisory. In these circumstances it is clear that the Conference will be able to profit by the work of the highly qualified experts belonging to the Tripartite Meeting. The Conference will thus be in possession of information, proposals, and suggestions of which the Office, when drafting this report, is necessarily ignorant, and which may easily embody solutions to some of the problems now unsolved.

It is in this somewhat exceptional position that the Office has drawn up a list of points on which it believes that the Conference should instruct it to consult Governments.

I. — FORM OF THE REGULATIONS

1. Draft Convention.

II. — NATURE OF THE REGULATIONS

2. General regulations with special provisions for coal mines, or special regulations for coal mines.

III. — UNDERGROUND WORKERS

§ 1. — SCOPE

With regard to Mines

3. Application of the regulations:

- (a) To all mines from which coal, including lignite, is the only or principal mineral extracted (with special scheme for lignite mines if considered desirable);

(Conv., 1935¹, Art. 1. para. 1, as amended
by prop. Dr. Conv., 1936.)

or,

- (b) To all mines from which coal, excluding lignite, is the only or principal mineral extracted.

With regard to Persons

4. Application of the regulations to any person occupied underground, by whatever employer and on whatever kind of work he may be employed.

(Conv., 1935, Art. 2, a.)

5. Possibility of excluding persons engaged in supervision or management who do not ordinarily perform manual work.

(Conv., 1935, Art. 2, a.)

§ 2. — NORMAL HOURS OF WORK

6. Assimilation of the normal hours of any worker to the time spent by him in the mine.

(Conv., 1935, Art. 3, para. 1.)

Definition of Time Spent in the Mine

7. In mines where access is by a shaft: the time spent in the mine to mean the period between the time when the worker enters the cage in order to descend and the time when he leaves the cage after re-ascending.

(Conv., 1935, Art. 3, para. 1, a.)

8. In mines where access is by an adit; the time spent in the mine to mean the period between the time when the worker passes through the entrance of the adit and the time of his return to the surface.

(Conv., 1935, Art. 3, para. 1, b.)

¹ Except where otherwise indicated, the provisions of this Convention are also to be found under the corresponding Articles of the Convention of 1931.

Time Spent in the Mine

9. Daily time:

- (a) Limitation of daily time spent in the mine, for any worker, to $7\frac{3}{4}$ hours;

(Conv., 1935, Art. 3, para. 2.)

- (b) Other limits.

10. Weekly time:

- (a) Limitation of weekly time spent in the mine, for any worker, $38\frac{3}{4}$ hours;

- (b) Limitation of weekly time spent in the mine, for any worker, to $38\frac{3}{4}$ hours, with possibility of introducing transitional scheme providing for longer hours and different distribution (see below, IX, points 63-65);

- (c) Other limits.

11. Collective calculation of hours of work:

The period between the time when the first workers of the shift, or of any group, leave the surface and the time when they return to the surface to be deemed the same as individual time spent in the mine provided that the order of and the time required for the descent and ascent of a shift, and of any group of workers, is approximately the same. -

(Conv., 1935, Art. 4.)

12. Collective calculation where the length of the shift is reckoned exclusive of winding time:

If national laws or regulations prescribe that for calculating the time spent in the mine the descent or ascent of the workers is to be calculated according to the weighted average duration of the descent or ascent of all shifts of workers in the whole country: the period between the time when the last worker of the shift leaves the surface and the time when the first worker of the same shift returns to the surface not in any mine to exceed the limits fixed for the individual time spent in the mine, less 30 minutes.

No method of regulation to be permitted by which the hewers, as a class of workers, would on the average work longer hours than the other classes of underground workers in the same shift.

(Conv., 1935, Art. 5, para. 1.)

Any Member which, having applied the method of calculation just defined, subsequently applies the methods of calculation mentioned above to make the change simultaneously for the whole country and not for a part thereof.

(Conv., 1935, Art. 5, para. 2.)

Determination of Individual Time in the Mine when Hours of Work are Calculated at the Workplace

13. Where, by law or custom effective either in the country as a whole or in a particular district of the country, hours of work are reckoned as being the period between the time of the arrival of the worker at the face or other working place and the time of his departure therefrom, exclusive of breaks: the maximum time spent by any worker at his place of work to be fixed in such a manner that this time, added to the weighted average of the time spent in travelling underground and in breaks by all the workers in the country or in the district, as the case may be, does not exceed the limits fixed for individual time spent in the mine.

(Prop. Dr. Conv., 1936, Art. 6, para. 1.)

14. Where the individual time spent in the mine is calculated by the above method: also limitation of the time spent by any worker at his place of work to 7 hours per day and 35 hours per week.

(Prop. Dr. Conv., 1936, Art. 6, para. 2.)

§ 3. — MAKING UP LOST TIME

15. Possibility of making up certain lost shifts.

16. Determination:

(a) By the international regulations, or

(b) By national laws or regulations, of

- (i) the cases in which lost time may be made up (collective stoppages due to public or local holidays, accidents, etc.);
- (ii) the period within which lost time must be made up, varying with the number of shifts to be made up;
- (iii) the maximum permissible extension of weekly time spent in the mine (one shift per week, for instance).

§ 4. — WORK ON SUNDAYS AND PUBLIC HOLIDAYS

17. Prohibition of employment of workers on underground work on Sundays and legal public holidays.

(Conv., 1935, Art. 6, para. 1.)

18. Possibility of working for part of a Sunday or legal public holiday, provided the workers enjoy a rest period of 24 consecutive hours, of which at least 18 fall on the Sunday or legal public holiday.

(Conv., 1935¹, Art. 6, para. 1.)

19. Determination of kinds of work which, by way of exception, may be authorised on Sundays and legal public holidays, by national laws or regulations, for workers over 18 years of age:

Work which, owing to its nature, must be carried on continuously; work in connection with the ventilation of the mine, of the prevention of damage to the ventilation apparatus, safety work, work in connection with first aid in case of accident or sickness, and the care of animals;

Survey work in so far as this cannot be done on other days without interrupting or disturbing the work of the undertaking;

Urgent work in connection with machinery and other appliances which cannot be carried out during the regular working time of the mine, and in other urgent or exceptional cases which are outside the control of the employer.

(Conv., 1935, Art. 6, para. 2.)

20. The competent authority to take appropriate measures for ensuring that no work is done on Sundays and legal public holidays except as authorised.

(Conv., 1935, Art. 6, para. 3.)

21. Work authorised on Sundays and legal public holidays to be paid for at not less than one-and-a-quarter times the regular rate.

(Conv., 1935, Art. 6, para. 4.)

22. Special compensation (compensatory rest period or adequate extra payment) to be given to workers who are engaged to any considerable extent on work authorised on Sundays or legal public holidays, the detailed application of this provision being regulated by national laws or regulations.

(Conv., 1935, Art. 6, para. 5.)

¹ Provision not figuring in the Convention of 1931.

§ 5. — SHORTER HOURS IN UNHEALTHY WORKPLACES

23. The competent authority to be empowered to fix lower maximum hours of work for workers in workplaces which are rendered particularly unhealthy by reason of abnormal conditions of temperature, humidity or other cause.

(Conv., 1935, Art. 7.)

§ 6. — EXTENSION OF NORMAL HOURS OF WORK

Extensions in Case of Accidents

24. Provision empowering the competent authority to issue regulations authorising extensions in case of accident, *force majeure* or urgent work to be done to the machinery, plant or equipment of the mine, even if coal production is thereby incidentally involved.

(Conv., 1935, Art. 8, para. 1.)

25. Limitation of extension to that necessary to avoid serious interference with the ordinary working of the mine.

(Conv., 1935, Art. 8, para. 1.)

26. Overtime worked in virtue of such extensions to be paid for at not less than one-and-a-quarter times the regular rate.

(Conv., 1935, Art. 8, para. 6.)

Extensions for Technical Reasons

27. Provision empowering the competent authority to issue regulations authorising extensions for technical reasons:

For workers employed on operations which, by their nature, must be carried on continuously,

For workers employed on technical work in so far as their work is necessary for preparing or terminating work in the ordinary way or for a full resumption of work on the next shift, provided that this does not refer to the production or transport of coal.

(Conv., 1935, Art. 8, para. 2.)

28. Determination of length of authorised extensions:

In general, half an hour a day and 2½ hours a week.

(Conv., 1935, Art. 8, para. 2, as amended
by prop. Dr. Conv., 1936, Art. 9, para. 2.)

29. Determination of length of extensions authorised for workers whose presence is indispensable for the work of ventilation and pumping stations and of such compressed-air stations as are necessary for ventilation; for underground storemen; and for winchmen and locomotive drivers and their indispensable assistants:

- (a) Extensions exceeding half an hour a day and $2\frac{1}{2}$ hours a week to be allowed, provided:

that no worker in the above grades who is employed on operations which, by their nature, must be carried on continuously may be employed for more than 8 hours per day or 42 hours per week, exclusive of the time spent in the mine by that worker in reaching and returning from his place of work, it being understood that in each case this time will be reduced to the indispensable minimum; the methods of application to be decided by the competent authority after consultation with the organisations of employers and workers concerned where such exist;

further, for underground storemen, for enginemen and men in charge of internal shafts who are engaged upon the transport of workers, for drivers of locomotives who are engaged upon the transport of workers, and for the indispensable assistants of the drivers, enginemen and men in charge of internal shafts mentioned above, the limit of such extension to be fixed by the regulations of the competent authority.

(Conv., 1935¹, Art. 8, para. 3, as amended
by prop. Dr. Conv., 1936, Art. 9, para.

- (b) More exact limits.

30. Extension of individual daily time spent in the mine on the day of the periodical change-over of shifts of workers whose presence is indispensable for the work of ventilation, pumping, and compressed-air stations.

(Conv., 1935¹, Art. 8, para. 4, as amended
by prop. Dr. Conv., 1936, Art. 9, para. 4.)

Determination of length of extension authorised: time necessary to permit the periodical change-over of shifts, provided weekly hours of work do not exceed on an average the limits fixed for the workers in question.

(Conv., 1935¹, Art. 8, para. 4, as amended
by prop. Dr. Conv., 1936, Art. 9, para. 4.)

¹ Provision not figuring in the Convention of 1931.

31. Limitation of the number of workers covered by extensions for continuous operations and for preparatory and complementary work to 5 per cent. of the total number of persons employed at the mine, in the case of mines in normal operation.

(Conv., 1935, Art. 8, para. 5.)

32. Other extensions necessary for technical reasons.

33. Overtime worked in virtue of extensions for the technical reasons mentioned above, except that necessitated by the periodical change-over of shifts, to be paid for at not less than one-and-a-quarter times the regular rate.

(Conv., 1935, Art. 8, para. 6.)

Overtime placed at Disposal of Undertakings

34. Provision enabling regulations issued by the competent authority to place a certain number of hours of overtime at the disposal of undertakings.

(Conv., 1935, Art. 9, para. 1.)

35. Determination of number of hours' overtime and manner in which it may be used.

(a) Quota of 60 hours placed directly at the disposal of the undertaking;

(Conv., 1935, Art. 9, para. 1.)

or

(b) Quota of 80 or 100 hours, placed directly at the disposal of the undertaking and subjected to revision procedure on expiry of a period to be determined; or

(c) Quota of 80 or 100 hours divided into two parts, the first (60 hours) to be placed directly at the disposal of the undertaking and the second to be used only in virtue of collective agreements; or

(d) Quota of 80 or 100 hours placed directly at the disposal of the undertaking and divided into two parts, the first (60 hours) to be allowed on a permanent basis and the second to be used only during a transitional period to be determined; or

(e) Quota of 80 or 100 hours divided into two parts, the first (60 hours) to be placed directly at the disposal of the undertaking on a permanent basis and the second to be used only during a transitional period to be determined, and then only in virtue of collective agreements.

§ 7. — NATIONAL REGULATIONS FOR APPLICATION

36. Principle that the organisations of employers and workers concerned shall be consulted before issue of the national regulations for which provision is made.

(Conv., 1935, Art. 10.)

37. Principle that collective agreements may be used for application of the provisions of the Convention at the discretion of the competent authority, on condition that under national legislation collective agreements have the force of law in relation either to the whole of the coal-mining industry or to one or more branches of that industry.

(Prop. Dr. Conv., 1936, Art. 11, para. 2.)

§ 8. — ANNUAL REPORTS BY RATIFYING STATES

38. Specification in the Draft Convention of the information to be furnished in the annual reports of States, particularly with regard to the action taken to regulate time spent in the mine and with regard to regulations issued by the competent authority in virtue of the provisions of the Convention.

(Conv., 1935, Art. 11, as amended by prop. Dr. Conv., 1936, Art. 12.)

§ 9. — PROVISIONS TO FACILITATE ENFORCEMENT

39. The management of every mine to notify by means of notices conspicuously posted at the pithead or in some other suitable place or by such other method as may be approved by the competent authority:

- (i) The hours at which the workers of each group or shift shall begin to descend and shall have completed the ascent.

(Conv., 1935, Art. 12, a.)

- (ii) Such particulars as the competent authority may prescribe concerning the methods of application of the international regulations.

(Prop. Dr. Conv., 1936, Art. 13, a, (ii).)

40. The competent authority to approve the time table and changes therein.

(Conv., 1935, Art. 12, a.)

41. The management of every mine to keep a record in the form prescribed by national laws or regulations of all additional hours worked.

(Conv., 1935, Art. 12, b.)

42. Other methods of supervision.

§ 10. — SPECIAL SCHEME FOR UNDERGROUND LIGNITE MINES

43. Insertion in the Convention of a special scheme for underground lignite mines.

(Conv. 1935, Art. 13.)

44. Definition of lignite mines:

The term "lignite mine" to mean any mine, outside the United States of America, from which coal of the geological period subsequent to the carboniferous period is extracted.

(Conv., 1935, Art. 1, para. 2, as amended by prop. Dr. Conv., 1936.)

Determination of Special Scheme

45. Application to these mines of the general scheme contained in the Convention, provided:

- (i) that, in accordance with such conditions as may be prescribed by national laws or regulations, the competent authority may permit collective breaks involving a stoppage of production not to be included in the time spent in the mine, such breaks in no case to exceed 30 minutes for each shift, this permission to be given only after the necessity for such a system has been established by official investigation in each individual case and after consultation with the representatives of the workers concerned;

(Conv., 1935, Art. 13, para. 1. a.)

- (ii) that the number of hours' overtime may be increased to not more than 75 hours a year, and that

the competent authority may approve collective agreements which provide for not more than 75 hours' further overtime a year in the case of individual districts or mines where this is required on account of special technical or geological conditions.

(Conv., 1935, Art. 13, para. 1, a, and 2.)

IV. — SURFACE WORKERS OF UNDERGROUND MINES

46. Inclusion of surface workers of underground mines in the scope of international regulations for industrial workers in general, or

Inclusion of these workers in the scope of the Convention concerning hours of work in coal mines.

If Surface Workers are included in the Scope of the Convention concerning Coal Mines

47. Determination of persons to be included: workers, salaried employees, technical staff;

Distinction between the staff of the mining undertaking proper and that of ancillary establishments—coke works, briquette works, distilleries, etc.

48. Determination of persons to be excluded;

- (a) Possibility of excluding persons engaged in supervision or management who do not ordinarily perform manual work;
- (b) Other systems of exclusion.

49. Determination of hours scheme.

- (a) Application to surface workers of hours scheme proposed for industrial workers in general, and to this end, use of the questionnaire concerning these workers; or
- (b) Extension to surface workers of the hours of work scheme for workers in open coal mines contained in the proposed Draft Convention of 1936. (See below, V, point 56.)

V. — WORKERS IN OPEN COAL MINES

50. Application of the regulations to workers in open coal mines.

(Conv., 1935, Art. 14, as amended by
prop. Dr. Conv., 1936, Art. 15.)

If the International Regulations are applied to Surface Workers of Underground Mines

Application of the regulations to all workers in open coal mines.

51. Determination of persons to be included: workers, salaried employees, technical staff;

Distinction between the staff of the mining undertaking proper and that of ancillary establishments—coke works, briquette works, distilleries, etc.

52. Determination of persons to be excluded:

- (a) Possibility of excluding persons engaged in supervision or management who do not ordinarily perform manual work;
- (b) Other systems of exclusion.

53. Determination of hours scheme.

- (a) Application to the persons in question of the hours scheme proposed for industrial workers in general, and to this end, use of the questionnaire concerning these workers; or
- (b) Extension to the persons in question of the hours of work scheme for workers in open coal mines contained in the proposed Draft Convention of 1936. (See below, V, point 57.)

If the International Regulations are not applied to Surface Workers of Underground Mines

Application of the regulations only to persons employed in extraction.

54. Determination of persons to be included:

All persons employed directly or indirectly in the extraction of coal.

(Conv., 1935, Art. 2, b.)

55. Determination of persons to be excluded:

Possibility of excluding persons engaged in supervision or management who do not ordinarily perform manual work.

(Conv., 1935, Art. 2, b.)

56. Determination of hours of work scheme:

Application to these workers of the general scheme contained in the Convention, provided

(i) that hours of work do not exceed

38 $\frac{3}{4}$ hours a week, the competent authority being empowered to extend this period, after consultation with the organisations of employers and workers concerned, up to 40 hours a week, or

the limits mentioned above, with a higher limit during a transitional period (see below, IX, points 63-65),

and that, in countries where the hours of work of underground workers are calculated at the workplace, hours of work in open mines may not exceed the limits fixed for underground workers; the methods of application to be decided by the competent authority after consultation with the organisations of employers and workers concerned; and provided

(ii) that the number of hours' overtime may be increased to not more than 100 hours throughout the country, and that where special needs so require, but only in such cases, the competent authority may approve collective agreements which provide for an increase of the above-mentioned 100 hours by not more than a further 100 hours a year.

(Prop. Dr. Conv., 1936, Art. 15.)

VI. — SPECIAL SCHEMES FOR CERTAIN COUNTRIES

57. Inclusion in the international regulations of special schemes for certain countries, in conformity with the provisions of Article 19, paragraph 3, of the Constitution of the International Labour Organisation.

Possible Special Schemes

58. For Asiatic countries: China, India, and Japan: Hours of work to be fixed at

8 hours a day and 48 hours a week for surface workers, and

7 $\frac{3}{4}$ hours a day and 46 $\frac{1}{2}$ hours a week for underground workers.

59. For Chile: for submarine deposits, exclusion of travelling time underground in both directions, minus the average travelling time underground in European mines, from the calculation of the individual time spent in the mine.

60. For the Union of South Africa, a special scheme, to be determined with reference to the character and the conditions of employment of coal mine workers in that country.

VII.. — SAFEGUARDING CLAUSE

61. Inclusion in the regulations of a safeguarding clause relating to the conditions stipulated in national laws or regulations, awards, customs or agreements that are more favourable than those provided in the international regulations.

(Conv., 1935, Art. 15, as amended by
prop. Dr. Conv., 1936, Art. 16.)

VIII. — SUSPENSION OF APPLICATION OF THE REGULATIONS

62. Possibility of suspension of the application of the international regulations by the Government of any country in the event of emergency endangering the national safety.

(Conv. 1935, Art. 16.)

IX. — GRADUAL APPLICATION OF THE REGULATIONS

63. Gradual application of the international regulations, as regards the reduction of hours of work, for all the coal mines of any country or for certain classes of mines, or for certain mining districts:

The competent authority to be empowered to fix hours of work for the fortnight, at 11 shifts (6 shifts in one week and 5 shifts in the next) of 7 hours 45 minutes each for underground workers and 8 hours for surface workers.

64. Determination by national laws or regulations of the cases in which the transitional scheme mentioned above would be applicable.

65. Determination in the international regulations of the period on expiry of which the transitional scheme would cease to apply (2-4 years, for instance).

X. — COMING INTO FORCE AND DURATION OF THE CONVENTION

66. Inclusion in the Convention of a provision that until it has been ratified by certain named States, any party to the Convention may denounce it at any time by giving one month's notice.

XI. — REVISION OF THE CONVENTION ¹

67. Inclusion in the Convention of a special clause providing for consideration by the Governing Body of the desirability of revising certain provisions of the Convention on expiry of a period shorter than the period contemplated by the usual Article relating to periodical reports.

68. Determination of the period on expiry of which the desirability of revising certain provisions of the Convention should be considered (2-4 years, for instance).

69. Determination of the provisions to which the revision might relate:

- (i) Maximum limits for hours of work in the different classes of mines;
- (ii) Exceptional methods of calculating hours of work:
 - (a) collective calculation excluding all winding time;
 - (b) calculation of hours of work at the workplace.
- (iii) Number of hours' overtime allowed for the different classes of mines.
- (iv) Special schemes.

¹ Cf. Conv., 1935, Art. 21.

APPENDICES

I

DRAFT CONVENTION [No. 46] LIMITING HOURS OF WORK IN COAL MINES (REVISED 1935)

The General Conference of the International Labour Organisation,

Having been convened at Geneva by the Governing Body of the International Labour Office, and having met in its Nineteenth Session on 4 June 1935, and

Having decided upon the adoption of certain proposals with regard to the partial revision of the Convention limiting hours of work in coal mines adopted by the Conference at its Fifteenth Session, which is the seventh item on the Agenda of the Session, and

Considering that these proposals must take the form of a Draft International Convention,

adopts, this twenty-first day of June of the year one thousand nine hundred and thirty-five, the following Draft Convention which may be cited as the Hours of Work (Coal Mines) Convention (Revised), 1935:

Article 1

1. This Convention shall apply to all coal mines, that is to say, to any mine from which only hard coal or lignite, or principally hard coal or lignite together with other minerals, is extracted.

2. For the purpose of this Convention, the term "lignite mine" shall mean any mine from which coal of a geological period subsequent to the carboniferous period is extracted.

Article 2

For the purpose of this Convention, the term "worker" shall mean:

- (a) in underground coal mines, any person occupied underground, by whatever employer and on whatever kind of work he may be employed, except persons engaged in supervision or management who do not ordinarily perform manual work;
- (b) in open coal mines, any person employed directly or indirectly in the extraction of coal, except persons engaged in supervision or management who do not ordinarily perform manual work.

Article 3

1. Hours of work in underground hard coal mines shall mean the time spent in the mine, calculated as follows:

- (a) time spent in an underground mine shall mean the period between the time when the worker enters the cage in order to descend and the time when he leaves the cage after re-ascending;

- (b) in mines where access is by an adit the time spent in the mine shall mean the period between the time when the worker passes through the entrance of the adit and the time of his return to the surface.

2. In no underground hard coal mine shall the time spent in the mine by any worker exceed seven hours and forty-five minutes in the day.

Article 4

The provisions of this Convention shall be deemed to be complied with if the period between the time when the first workers of the shift or of any group leave the surface and the time when they return to the surface is the same as that laid down in paragraph 2 of Article 3. The order of and the time required for the descent and ascent of a shift and of any group of workers shall, moreover, be approximately the same.

Article 5

1. Subject to the provisions of the second paragraph of this Article, the provisions of this Convention shall be deemed to be complied with if the national laws or regulations prescribe that for calculating the time spent in the mine the descent or ascent of the workers is to be calculated according to the weighted average duration of the descent or ascent of all shifts of workers in the whole country. In this case, the period between the time when the last worker of the shift leaves the surface and the time when the first worker of the same shift returns to the surface shall not in any mine exceed seven hours and fifteen minutes; provided that no method of regulation shall be permitted by which the hewers as a class of workers would on the average work longer hours than the other classes of underground workers in the same shift.

2. Any Member which, having applied the method laid down in this Article, subsequently applies the provisions of Articles 3 and 4 shall make the change simultaneously for the whole country and not for any part thereof.

Article 6

1. Workers shall not be employed on underground work in coal mines on Sundays and legal public holidays:

Provided that this requirement shall be deemed to be complied with if the workers enjoy a rest period of twenty-four consecutive hours, of which at least eighteen fall upon the Sunday or legal public holiday.

2. National laws or regulations may authorise the following exceptions to the provisions of the preceding paragraph for workers over eighteen years of age:

- (a) for work which, owing to its nature, must be carried on continuously;
- (b) for work in connection with the ventilation of the mine and the prevention of damage to the ventilation apparatus, safety work, work in connection with first aid in the case of accident and sickness, and the care of animals;
- (c) for survey work in so far as this cannot be done on other days without interrupting or disturbing the work of the undertaking;

(d) for urgent work in connection with machinery and other appliances which cannot be carried out during the regular working time of the mine, and in other urgent or exceptional cases which are outside the control of the employer.

3. The competent authorities shall take appropriate measures for ensuring that no work is done on Sundays and legal public holidays except as authorised by this Article.

4. Work permitted under paragraph 2 of this Article shall be paid for at not less than one-and-a-quarter times the regular rate.

5. Workers who are engaged to any considerable extent on work permitted under paragraph 2 of this Article shall be assured either a compensatory rest period or an adequate extra payment in addition to the rate specified in paragraph 4 of this Article. The detailed application of this provision shall be regulated by national laws or regulations.

Article 7

Lower maxima than those specified in Articles 3, 4 and 5 shall be laid down by regulations made by public authority for workers in workplaces which are rendered particularly unhealthy by reason of abnormal conditions of temperature, humidity or other cause.

Article 8

1. Regulations made by public authority may provide that the hours specified in Articles 3, 4, 5 and 7 may be exceeded in case of accident, actual or threatened, in case of *force majeure*, or in case of urgent work to be done to machinery, plant or equipment of the mine as a result of a breakdown of such machinery, plant or equipment, even if coal production is thereby incidentally involved, but only so far as may be necessary to avoid serious interference with the ordinary working of the mine.

2. Regulations made by public authority may provide that the hours specified in Articles 3, 4, 5 and 7 may be exceeded in the case of workers employed on operations which by their nature must be carried on continuously or on technical work, in so far as their work is necessary for preparing or terminating work in the ordinary way or for a full resumption of work on the next shift, provided, however, that this shall not refer to the production or transport of coal. The additional time so authorised for any individual worker shall not, except as specified in paragraphs 3 and 4 of this Article, exceed half an hour on any day.

3. Regulations made by public authority may provide that the hours specified in Articles 3, 4, 5 and 7 may be exceeded to an extent exceeding half an hour in the case of the following grades:

- (a) workers whose presence is indispensable for the work of ventilation and pumping stations and of such compressed air stations as are necessary for ventilation;
- (b) underground storemen; and
- (c) winchmen and locomotive drivers and their indispensable assistants:

Provided that no worker in the above grades who is employed on operations which by their nature must be carried on continuously may be employed for more than eight hours per day exclusive of the time

spent in the mine by that worker in reaching and returning from his place of work, it being understood that in each case this time will be reduced to the indispensable minimum.

Provided also that in the case of

- (a) underground storemen;
- (b) enginemen and men in charge of internal shafts who are engaged upon the transport of workers;
- (c) drivers of locomotives who are engaged upon the transport of workers; and
- (d) the indispensable assistants of the grades specified in clauses (b) and (c):

the limit of such extension shall be that fixed by the regulations of the public authority.

4. Regulations made by public authority may provide that the limit of hours specified in Articles 3, 4, 5 and 7 and in paragraphs 2 and 3 of this Article may be exceeded in the case of workers whose presence is indispensable for the work of underground ventilation, pumping and compressed air stations, but only to such extent as may be necessary to permit the periodical change-over of shifts, and time worked in virtue of this provision shall not be deemed to be overtime, so however that during any period of three weeks no worker shall work more than twenty-one shifts of the length prescribed for his grade by paragraph 2 or paragraph 3 of this Article as the case may be.

5. In the case of mines in normal operation the number of persons coming under paragraphs 2 and 3 of this Article shall at no time exceed five per cent. of the total number of persons employed at the mine.

6. Overtime worked in virtue of the provisions of this Article shall be paid for at not less than one-and-a-quarter times the regular rate.

Article 9

1. Regulations made by public authority may, in addition to the provisions of Article 8, put not more than sixty hours' overtime in the year at the disposal of undertakings throughout the country as a whole.

2. This overtime shall be paid for at not less than one-and-a-quarter times the regular rate.

Article 10

The regulations mentioned in Articles 7, 8 and 9 shall be made by public authority after consultation with the organisations of employers and workers concerned.

Article 11

The annual reports to be submitted under Article 408 of the Treaty of Versailles and the corresponding Articles of the other Treaties of Peace shall contain all information as to the action taken to regulate the hours of work in accordance with the provisions of Article 3, 4 and 5. They shall also furnish complete information concerning the regulations made under Articles 7, 8, 9, 12, 13 and 14 and concerning their enforcement.

Article 12

In order to facilitate the enforcement of the provisions of this Convention, the management of every mine shall be required:

- (a) to notify by means of notices conspicuously posted at the pithead or in some other suitable place, or by such other method as may be approved by the public authority, the hours at which the workers of each shift or group shall begin to descend and shall have completed the ascent.

These hours shall be approved by the public authority and be so fixed that the time spent in the mine by each worker shall not exceed the limits prescribed by this Convention. When once notified, they shall not be changed except with the approval of the public authority and by such notice and in such manner as may be approved by the public authority.

- (b) to keep a record in the form prescribed by national laws or regulations of all additional hours worked under Articles 8 and 9.

Article 13

1. In underground lignite mines Articles 3 and 4 and Articles 6 to 12 of this Convention shall apply subject to the following provisions:

- (a) in accordance with such conditions as may be prescribed by national laws or regulations, the competent authority may permit collective breaks involving a stoppage of production not to be included in the time spent in the mine, provided that such breaks shall in no case exceed thirty minutes for each shift. Such permission shall only be given after the necessity for such a system has been established by official investigation in each individual case and after consultation with the representatives of the workers, concerned.

- (b) the number of hours' overtime provided for in Article 9 may be increased to not more than seventy-five hours a year.

2. In addition, the competent authority may approve collective agreements which provide for not more than seventy-five hours' further overtime a year. Such further overtime shall likewise be paid for at the rate prescribed in Article 9, paragraph 2. It shall not be authorised generally for all underground lignite mines, but only in the case of individual districts or mines where it is required on account of special technical or geological conditions.

Article 14

In open hard coal and lignite mines Articles 3 to 13 of this Convention shall not be applicable. Nevertheless, Members which ratify this Convention undertake to apply to these mines the provisions of the Washington Convention of 1919 limiting the hours of work in industrial undertakings to eight in the day and forty-eight in the week, provided that the amount of overtime which may be worked in virtue of Article 6, paragraph (b), of the said Convention shall not exceed one hundred hours a year. Where special needs so require, and only in such cases, the competent authority may approve collective agreements which provide for an increase of the aforesaid one hundred hours by not more than a further hundred hours a year.

Article 15

Nothing in this Convention shall have the effect of altering national laws or regulations with regard to hours of work so as to lessen the guarantees thereby afforded to the workers.

Article 16

The operation of the provisions of this Convention may be suspended in any country by the Government in the event of emergency endangering the national safety.

Article 17

The formal ratifications of this Convention under the conditions set forth in Part XIII of the Treaty of Versailles and in the corresponding Parts of the other Treaties of Peace shall be communicated to the Secretary-General of the League of Nations for registration.

Article 18

1. This Convention shall be binding only upon those Members of the International Labour Organisation whose ratifications have been registered with the Secretariat.

2. It shall come into force six months after the date on which the ratifications of two of the following Members have been registered by the Secretary-General of the League of Nations: Belgium, Czechoslovakia, France, Germany, Great Britain, Netherlands and Poland.

3. Thereafter the Convention shall come into force for any Member six months after the date on which its ratification has been registered.

Article 19

As soon as the ratifications of two of the Members mentioned in the second paragraph of Article 18 have been registered with the Secretariat, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organisation. He shall likewise notify them of the registration of ratifications which may be communicated subsequently by other Members of the Organisation.

Article 20

1. A Member which has ratified this Convention may denounce it after the expiration of five years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered with the Secretariat.

2. Each Member which has ratified this Convention and which does not, within the year following the expiration of the period of five years mentioned in the preceding paragraph, exercise the right of denunciation provided for in this Article, will be bound for another period of five years and, thereafter, may denounce this Convention at the expiration of each period of three years under the terms provided for in this Article.

Article 21

1. At the latest within three years from the coming into force of this Convention the Governing Body of the International Labour Office

shall place on the Agenda of the Conference the question of the revision of this Convention on the following points:

- (a) the possibility of a further reduction in the hours of work provided for in paragraph 2 of Article 3;
- (b) the right to have recourse to the exceptional method of calculation laid down in Article 5;
- (c) the possibility of modifying the provisions of Article 13, paragraph 1, sub-paragraphs (a) and (b), in the direction of a reduction of the hours of work;
- (d) the possibility of a reduction in the amount of overtime provided for in Article 14.

2. Moreover, at the expiration of each period of ten years after the coming into force of this Convention, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention and shall consider the desirability of placing on the Agenda of the Conference the question of its revision in whole or in part.

Article 22

1. Should the Conference adopt a new Convention revising this Convention in whole or in part, then, unless the new Convention otherwise provides,

- (a) the ratification by a Member of the new revising Convention shall *ipso jure* involve the immediate denunciation of this Convention, notwithstanding the provisions of Article 20 above, if and when the new revising Convention shall have come into force;
- (b) as from the date when the new revising Convention comes into force this Convention shall cease to be open to ratification by the Members.

2. This Convention shall in any case remain in force in its actual form and content for those Members which have ratified it but have not ratified the revising Convention.

Article 23

The French and English texts of this Convention shall both be authentic.

II

TEXT OF PROPOSED DRAFT CONVENTION CONCERNING THE REDUCTION OF HOURS OF WORK IN COAL MINES, SUBMITTED AT THE TWENTIETH SESSION OF THE INTERNATIONAL LABOUR CONFERENCE (1936) BY THE COMMITTEE ON HOURS OF WORK IN COAL MINES AND REVIEWED BY THE DRAFTING COMMITTEE OF THE CONFERENCE

The General Conference of the International Labour Organisation,

Having met at Geneva in its Twentieth Session on 4 June 1936;

Considering that the question of the reduction of hours of work in coal mines is the sixth item on the Agenda of the Session;

Confirming the principle laid down in the Forty-Hour Week Convention, 1935, including the maintenance of the standard of living;

Considering it to be desirable that this principle should be applied by international agreement to coal mines;

adopts this . . . day of June one thousand nine hundred and thirty-six the following Draft Convention which may be cited as the Reduction of Hours of Work (Coal Mines) Convention, 1936.

Article 1

1. This Convention applies to all mines from which coal, including lignite, is the only or principal mineral extracted.

2. For the purpose of this Convention, the term "lignite mine" means any mine, outside the United States of America, from which coal of a geological period subsequent to the carboniferous period is extracted.

Article 2

For the purpose of this Convention, the term "worker" means:

- (a) in underground mines, any person occupied underground, by whatever employer and on whatever kind of work he may be employed, except persons engaged in supervision or management who do not ordinarily perform manual work;
- (b) in open mines, any person employed directly or indirectly in the extraction of coal, except persons engaged in supervision or management who do not ordinarily perform manual work.

Article 3

1. Hours of work in underground mines means the time spent in the mine calculated as follows:

- (a) time spent in an underground mine means the period between the time the worker enters the cage in order to descend and the time when he leaves the cage after re-ascending;
- (b) in mines where access is by an adit the time spent in the mine means the period between the time when the worker passes through the entrance of the adit and the time of his return to the surface.

2. In no underground mine shall the time spent in the mine by any worker exceed seven hours and forty-five minutes in the day nor shall it exceed thirty-eight hours and forty-five minutes per week.

3. The competent authority shall, after consultation with the organisations of employers and workers concerned where such exist, decide the methods of application.

Article 4

The provisions of paragraph 2 of Article 3 relating to the daily limit of hours shall be deemed to be complied with if the period between the time when the first workers of the shift or of any group leave the surface and the time when they return to the surface does not exceed seven hours and forty-five minutes. The order of and the time required for the descent and ascent of a shift and of any group of workers shall, moreover, be approximately the same.

Article 5

1. Subject to the provisions of the second paragraph of this Article, the provisions of paragraph 2 of Article 3 relating to the daily limit of hours shall be deemed to be complied with if the national laws or regulations prescribe that for calculating the time spent in the mine the descent or ascent of the workers is to be calculated according to the weighted average duration of the descent or ascent of all shifts of workers in the whole country. In this case, the period between the time when the last worker of the shift leaves the surface and the time when the first worker of the same shift returns to the surface shall not in any mine exceed seven hours and fifteen minutes: provided that no method of regulation shall be permitted by which the hewers as a class of workers would on the average work longer hours than the other classes of underground workers in the same shift.

2. Any Member which, having applied the method laid down in this Article, subsequently applies the provisions of Articles 3 and 4, shall make the change simultaneously for the whole country and not for any part thereof.

Article 6

1. Where by law or custom effective either in the country as a whole or in a particular district of the country hours of work are reckoned as being the period between the time of the arrival of the worker at the face or other working place and the time of his departure therefrom, exclusive of breaks, the provisions of paragraph 2 of Article 3 of this Convention shall be deemed to be complied with if the maximum time spent by any worker at his place of work is fixed in such a manner that this time,

added to the weighted average of the time spent in travelling underground and in breaks by all the workers in the country or in the district as the case may be, does not exceed the limits fixed in paragraph 2 of Article 3.

2. The time spent by any worker at his place of work, determined according to the provisions of the preceding paragraph, shall not in any case exceed seven hours per day nor thirty-five hours per week.

Article 7

1. Workers shall not be employed on underground work in mines on Sundays and legal public holidays:

Provided that this requirement shall be deemed to be complied with if the workers enjoy a rest period of twenty-four consecutive hours, of which at least eighteen fall upon the Sunday or legal public holiday.

2. National laws or regulations may authorise the following exceptions to the provisions of the preceding paragraph for workers over eighteen years of age:

- (a) for work which, owing to its nature, must be carried on continuously;
- (b) for work in connection with the ventilation of the mine and the prevention of damage to the ventilation apparatus, safety work, work in connection with first aid in the case of accident and sickness, and the care of animals;
- (c) for survey work, in so far as this cannot be done on other days without interrupting or disturbing the work of the undertaking;
- (d) for urgent work in connection with machinery and other appliances which cannot be carried out during the regular working time of the mine, and in other urgent or exceptional cases which are outside the control of the employer.

3. The competent authority shall take appropriate measures for ensuring that no work is done on Sundays and legal public holidays except as authorised by this Article.

4. Work permitted under paragraph 2 of this Article shall be paid for at not less than one-and-a-quarter times the regular rate.

5. Workers who are engaged to any considerable extent on work permitted under paragraph 2 of this Article shall be assured either a compensatory rest period or an adequate extra payment in addition to the rate specified in paragraph 4 of this Article. The detailed application of this provision shall be regulated by national laws or regulations.

Article 8

Lower maxima than those specified in Articles 3, 4, 5 and 6 shall be laid down by regulations made by the competent authority for workers in workplaces which are rendered particularly unhealthy by reason of abnormal conditions of temperature, humidity or other cause.

Article 9

1. Regulations made by the competent authority may provide that the hours specified in Articles 3, 4, 5, 6 and 8 may be exceeded in case of accident, actual or threatened, in case of *force majeure*, or in case of

urgent work to be done to machinery, plant or equipment of the mine as a result of a breakdown of such machinery, plant or equipment even if coal production is thereby incidentally involved, but only so far as may be necessary to avoid serious interference with the ordinary working of the mine.

2. Regulations made by the competent authority may provide that the hours specified in Articles 3, 4, 5, 6 and 8 may be exceeded in the case of workers employed on operations which by their nature must be carried on continuously or on technical work, in so far as their work is necessary for preparing or terminating work in the ordinary way or for a full resumption of work on the next shift, provided, however, that this shall not refer to the production or transport of coal. The additional time so authorised for any individual worker shall not, except as specified in paragraphs 3 and 4 of this Article, exceed half an hour on any day or two hours and a half in any week.

3. Regulations made by the competent authority may provide that the hours specified in Articles 3, 4, 5, 6 and 8 may be exceeded to an extent exceeding half an hour on any day and two hours and a half in any week in the case of the following grades:

- (a) workers whose presence is indispensable for the work of ventilation and pumping stations and of such compressed air stations as are necessary for ventilation;
- (b) underground store-men; and
- (c) winchmen and locomotive drivers and their indispensable assistants:

Provided that no worker in the above grades who is employed on operations which by their nature must be carried on continuously may be employed for more than eight hours per day or forty-two hours in the week exclusive of the time spent in the mine by that worker in reaching and returning from his place of work, it being understood that in each case this time will be reduced to the indispensable minimum, the methods of application being decided in each country by the competent authority after consultation with the organisations of employers and workers concerned where such exist.

Provided also that in the case of:

- (a) underground store-men,
- (b) enginemen and men in charge of internal shafts who are engaged upon the transport of workers,
- (c) drivers of locomotives who are engaged upon the transport of workers, and
- (d) the indispensable assistants of the grades specified in clauses (b) and (c),

the limits of such extension shall be those fixed by the regulations of the competent authority.

4. Regulations made by the competent authority may provide that the daily limit of hours specified in Articles 3, 4, 5, 6 and 8 and in paragraphs 2 and 3 of this Article may be exceeded in the case of workers whose presence is indispensable for the work of underground ventilation, pumping and compressed air stations, but only to such extent as may be necessary to permit the periodical change-over of shifts and subject

to the weekly hours of work of workers in these grades not exceeding the limits fixed in paragraphs 2 and 3 of this Article. Time worked in virtue of this provision shall not be deemed to be overtime.

5. In the case of mines in normal operation the number of persons coming under paragraphs 2 and 3 of this Article shall at no time exceed five per cent. of the total number of persons employed at the mine.

6. Overtime worked in virtue of the provisions of this Article shall be paid for at not less than one-and-a-quarter times the regular rate.

Article 10

1. Regulations made by the competent authority may, in addition to the provisions of Article 9, put not more than sixty hours' overtime in the year at the disposal of undertakings throughout the country as a whole.

2. This overtime shall be paid for at not less than one-and-a-quarter times the regular rate.

Article 11

1. The regulations mentioned in Articles 8, 9, 10 and 15 shall be made after consultation with the organisations of employers and workers concerned where such exist.

2. If the legislation of any Member provides that collective agreements between organisations of employers and workers shall, under prescribed conditions, have the force of law in relation either to the whole of the coal-mining industry or to one or more branches of that industry, the provisions of such agreements shall be deemed to be regulations made in pursuance of Articles 8, 9, 10 and 15 of this Convention.

Article 12

The annual reports submitted by Members upon the application of this Convention shall contain information as to the action taken to regulate hours of work in accordance with the provisions of Articles 3, 4, 5 and 6. They shall also furnish complete information concerning the regulations made under Articles 8, 9, 10, 13, 14 and 15 and collective agreements deemed to be regulations in virtue of paragraph 2 of Article 11 and concerning the enforcement thereof.

Article 13

In order to facilitate the enforcement of the provisions of this Convention, the management of every mine shall be required:

(a) to notify by means of notices conspicuously posted at the pithead or in some other suitable place or by such other method as may be approved by the competent authority:

(i) the hours at which the workers of each group or shift shall begin to descend and shall have completed the ascent: these hours shall be approved by the competent authority and be so fixed that the time spent in the mine by each worker shall not exceed the limits prescribed by this Convention, and when once notified they shall not be changed except with the approval of the competent authority and by such notice and in such manner as may be approved by the competent authority;

- (ii) such particulars as the competent authority may prescribe concerning the methods of application of limits of hours of work decided in pursuance of Article 3, paragraph 3, Article 9, paragraph 3 and Article 15, paragraph 3;
- (b) to keep a record in the form prescribed by national laws or regulations of all additional hours worked under Articles 9 and 10.

Article 14

1. In underground lignite mines Articles 3 and 4 and Articles 6 to 13 of this Convention shall apply subject to the following provisions:

- (a) in accordance with such conditions as may be prescribed by national laws or regulations the competent authority may permit collective breaks involving a stoppage of production not to be included in the time spent in the mine provided that such breaks shall in no case exceed thirty minutes for each shift: such permission shall only be given after the necessity for such a system has been established by official investigation in each individual case, and after consultation with the representatives of the workers concerned;
- (b) the number of hours' overtime provided for in Article 10 may be increased to not more than seventy-five hours a year.

2. In addition, the competent authority may approve collective agreements which provide for not more than seventy-five hours' further overtime a year. Such further overtime shall likewise be paid for at the rate prescribed in Article 10, paragraph 2. It shall not be authorised generally for all underground lignite mines, but only in the case of individual districts or mines where it is required on account of special technical or geological conditions.

Article 15

1. In open mines the hours of work shall not exceed thirty-eight hours and forty-five minutes per week: Provided that the competent authority may, after consultation with the organisations of employers and workers concerned where such exist, authorise an extension, so, however, that in no case shall the hours of work exceed forty hours per week.

2. In countries where the provisions of Article 6 are applied to underground workers, the hours of work in open mines shall not exceed the time fixed by this Convention for underground workers.

3. The competent authority shall, after consultation with the organisations of employers and workers concerned where such exist, decide the methods of application.

4. The rules prescribed for underground mines by Articles 7, 8, 9, 11, 12 and 13 shall apply also to open mines.

5. Regulations made by the competent authority may place at the disposal of open mines throughout the country as a whole not more than one hundred hours of overtime additional to the overtime permitted under Article 9.

6. Where special needs so require but only in such cases the competent authority may approve collective agreements which provide for an

increase of the aforesaid one hundred hours by not more than a further hundred hours per year.

7. Overtime worked in virtue of paragraphs 5 and 6 of this Article shall be paid for at not less than one-and-a-quarter times the regular rate.

Article 16

Nothing in this Convention shall affect any law, award, custom or agreement between employers and workers which ensures more favourable conditions than those provided by this Convention.

Article 17

The operation of the provisions of this Convention may be suspended in any country by the Government in the event of emergency endangering the national safety.

Article 18

The formal ratifications of this Convention shall be communicated to the Secretary-General of the League of Nations for registration.

Article 19

1. This Convention shall be binding only upon those Members of the International Labour Organisation whose ratifications have been registered by the Secretary-General.

2. It shall come into force six months after the date on which the ratifications of two Members among the following countries have been registered by the Secretary-General: Belgium, Czechoslovakia, France, Germany, Great Britain, Netherlands, Poland and Union of Soviet Socialist Republics.

3. Thereafter, this Convention shall come into force for any Member six months after the date on which its ratification has been registered.

Article 20

As soon as the ratifications of two of the Members mentioned in the preceding Article have been registered, the Secretary-General of the League of Nations shall so notify all the Members of the International Labour Organisation. He shall likewise notify them of the registration of ratifications which may be communicated subsequently by other Members of the Organisation.

Article 21

1. A Member which has ratified this Convention may denounce it after the expiration of five years from the date on which the Convention first comes into force, by an act communicated to the Secretary-General of the League of Nations for registration. Such denunciation shall not take effect until one year after the date on which it is registered.

2. Each Member which has ratified this Convention and which does not, within the year following the expiration of the period of five years mentioned in the preceding paragraph, exercise the right of denunciation provided for in this Article, will be bound for another period of five years and, thereafter, may denounce this Convention at the expiration of each period of five years under the terms provided for in this Article.

Article 22

At the expiration of each period of ten years after the coming into force of this Convention, the Governing Body of the International Labour Office shall present to the General Conference a report on the working of this Convention and shall consider the desirability of placing on the Agenda of the Conference the question of its revision in whole or in part.

Article 23

1. Should the Conference adopt a new Convention revising this Convention in whole or in part, then, unless the new Convention otherwise provides,

- (a) the ratification by a Member of the new revising Convention shall *ipso jure* involve the immediate denunciation of this Convention, notwithstanding the provisions of Article 21 above, if and when the new revising Convention shall have come into force;
- (b) as from the date when the new revising Convention comes into force this Convention shall cease to be open to ratification by the Members.

2. This Convention shall in any case remain in force in its actual form and content for those Members which have ratified it but have not ratified the revising Convention.

Article 24

The French and English texts of this Convention shall both be authentic.